

Victor Jones

regional transportation plan

amendment

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

JUL 12 1982

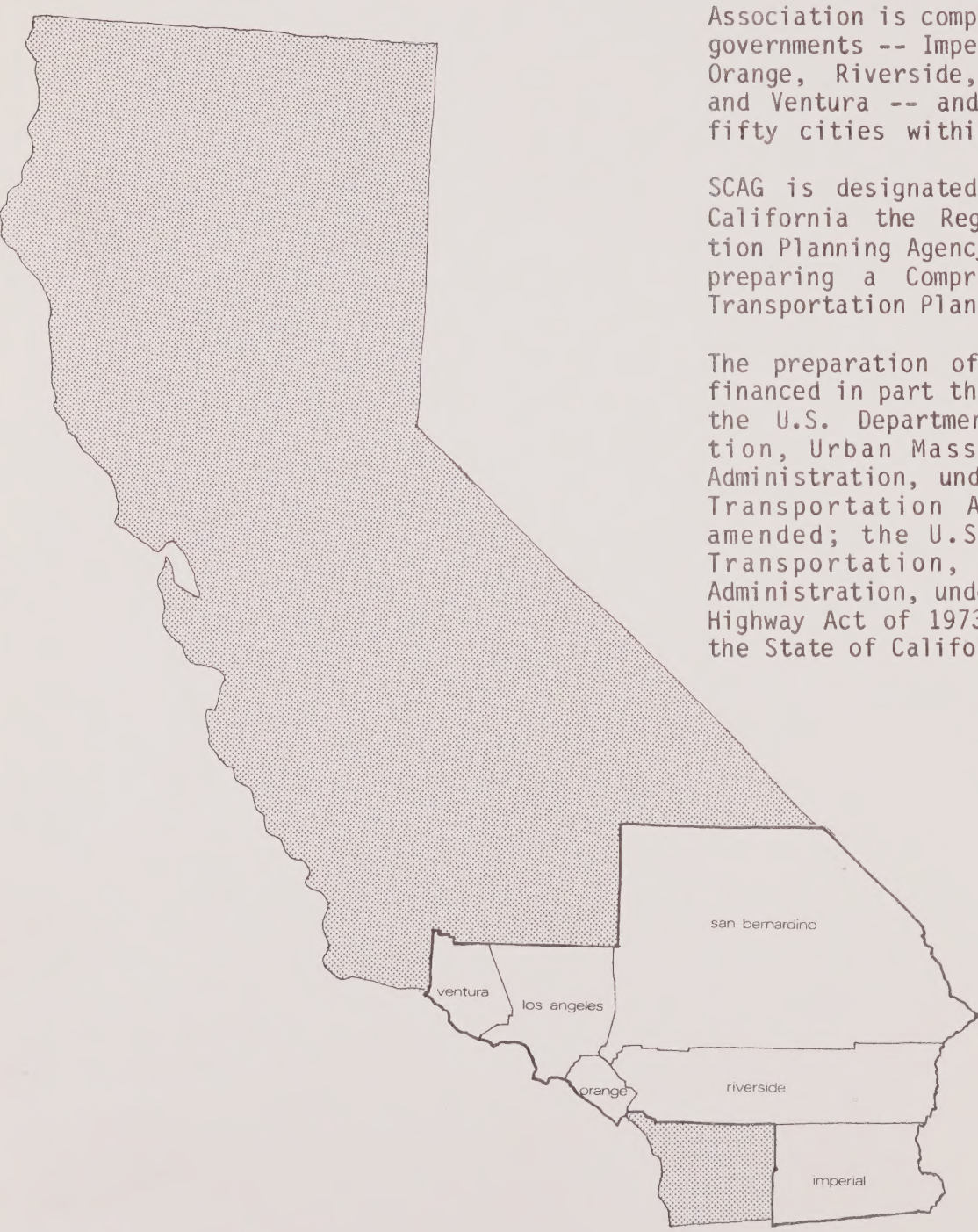
UNIVERSITY OF CALIFORNIA

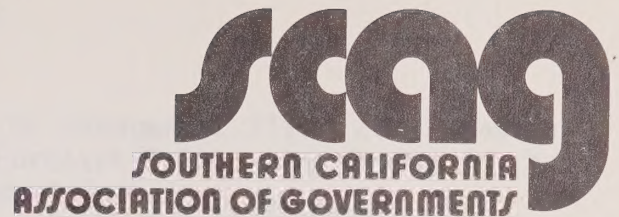


The Southern California Association of Governments (SCAG) was formed by local elected officials in 1965 to deal with issues of regional concern. SCAG is a partnership of local governments joined together in voluntary agreements under the Joint Exercise of Powers Section of the California Government Code. The Association is composed of six county governments -- Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura -- and over one hundred fifty cities within these counties.

SCAG is designated by the State of California the Regional Transportation Planning Agency, responsible for preparing a Comprehensive Regional Transportation Plan.

The preparation of this report was financed in part through a grant from the U.S. Department of Transportation, Urban Mass Transportation Administration, under the Urban Mass Transportation Act of 1964, as amended; the U.S. Department of Transportation, Federal Highway Administration, under the Federal Aid Highway Act of 1973, as amended; and the State of California.





600 South Commonwealth Avenue • Suite 1000 • Los Angeles • California • 90005 • 213/385-1000

November, 1978

Dear Colleague:

The 1978 Regional Transportation Plan is being amended. This letter transmits the proposed amendments to the plan. The proposed amendments cover the following seven subject areas:

- a) SCAG 78 (Development Guide).
- b) Transportation tactics to improve air quality.
- c) Policies and actions to encourage more ridesharing, e.g., via carpooling and buses.
- d) Policies and actions emanating from the regional transportation development program (RTDP).
- e) Policies relating to paratransit services such as dial-a-ride and subscription bus service.
- f) Institutional arrangements made by transportation planning and operating bodies to improve transportation planning and programming.
- g) Allocation policies for the distribution of Federal public transit funds.

Previously announced was a series of public workshops and public hearings to discuss these topics. Following the workshops and hearings, which will be held in each of six counties of the region, the amendments to the plan will be adopted by the SCAG Executive Committee. A February 1979 adoption date is anticipated.

The RTP's Environmental Impact Report will also be updated and circulated along with the amendment package. Using the same outline and format as the certified Final 1978 RTP-EIR, this supplemental analysis will identify any adverse and/or beneficial environmental effects associated with implementation of the amendments.

If you have any questions about the proposed amendments please phone Mr. Michael Zdon at SCAG, extension 333.

Sincerely,

W. O. Ackermann Jr.

W. O. Ackermann, Jr.
Director of Transportation Planning

WOA:DM:gm

Attachment

PUBLIC MEETINGS

Workshops

All these workshops will discuss the Air Quality Management Plan, 208 Areawide Waste Treatment Management Plan, SCAG-78 Growth Forecast Policy, Amendments to the Regional Transportation Plan and Environmental Impact Reports.

- Nov. 11 LOS ANGELES COUNTY: 9:00 - 12:00 Noon, Rosemead Community Center, 3936 N. Muskatel, Rosemead
- Nov. 15 SAN BERNARDINO COUNTY: 7:00 p.m., Lower Commons, California State College, San Bernardino
- Nov. 17 ORANGE COUNTY: 10:00 - 1:00 p.m., Newport Harbor-Costa Mesa Board of Realtors, 401 N. Newport Blvd., Newport

Special Workshops

These workshops address the plans as noted:

- Nov. 8 IMPERIAL COUNTY: 7:00 - 9:00 p.m., Chamber of Commerce, 1100 Main St., El Centro (Development Guide & Amendments to the RTP)
- Nov. 14 VENTURA COUNTY: 7:00 p.m. Larwin Community Center, 1692 Sycamore Drive, Simi Valley (Development Guide and Amendments to the RTP & EIR).
- Nov. 14 LOS ANGELES COUNTY: 7:30 p.m. Webster School Cafeteria, 3602 Winter Canyon Rd., Malibu (water quality)
- Nov. 15 LOS ANGELES COUNTY: Pasadena Lung Association 7:30 - 9:30 p.m., Faculty Dining Room, Pasadena City College, 1570 E. Colorado, Pasadena (air quality)
- Nov. 16 LOS ANGELES COUNTY: 7:30 p.m. Wilson High School Multi-Purpose Room, 16455 Wedgeworth Dr., Hacienda Heights (water quality)

Hearings

Unless otherwise indicated, hearings are scheduled from 9:30 a.m. to 4 p.m. for the Air Quality Management Plan and 4-8 p.m. for the 208 Areawide Waste Treatment Management Plan, SCAG-78 Growth Forecast Policy, and Amendments to the Regional Transportation Plan. All hearings include Environmental Impact Reports.

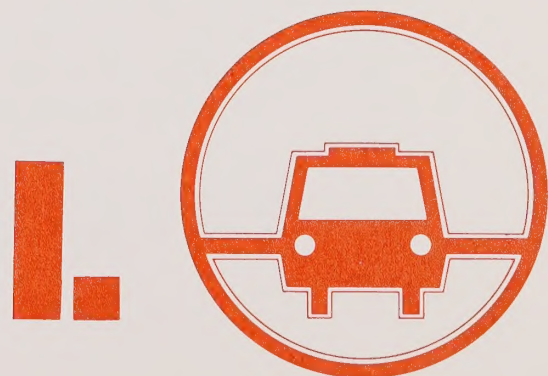
- Dec. 4 LOS ANGELES COUNTY: Board of Supervisors Hearing Room, 500 W. Temple St., Los Angeles
- Dec. 6 SAN BERNARDINO COUNTY: Chambers of the Board of Supervisors, 175 W. 5th St., 2nd Floor (use rear entrance), San Bernardino
- Dec. 8 LOS ANGELES COUNTY: West Covina City Council Chambers, 1444 Garvey Ave., West Covina
- Dec. 12 IMPERIAL COUNTY: Chamber of Commerce, 1100 Main Street, El Centro (4-8 p.m. only; Development Guide and RTP Amendments)
- Dec. 13 VENTURA COUNTY: Lower Plaza Assembly Room, County Government Center, 800 S. Victoria, Ventura (3-6 p.m. only; Development Guide and RTP Amendments)
- Dec. 14 ORANGE COUNTY: Board Hearing Room, 10 Civic Center Plaza, Santa Ana
- Dec. 15 RIVERSIDE COUNTY: Board of Supervisors Hearing Room, 14th Floor, 4080 Lemon St., Riverside


Table of Contents

(REGIONAL TRANSPORTATION PLAN AMENDMENTS)

	<u>Page</u>
I. <u>Executive Summary</u>	1
II. <u>Introduction</u>	
- History of 78 RTP adoption	8
- Format of the RTP Amendment Document	8
III. <u>Elements of Amendments</u>	
<u>Brief overview of work on:</u>	
- SCAG-78	10
- Air Quality Management Plan	11
- Ridesharing Plan	11
- Regional Transit Development Program	14
- Institutional Arrangements	17
- Paratransit policies	18
- Section 5 allocation policy (Los Angeles, Long Beach Urbanized Area)	18
IV. <u>Amendments by Chapter to RTP</u>	
RTP Chapter	
4.0 Objectives	
- Revised objective for Air Quality	20
- New Ridesharing objective	22
5.0 Policies	
Air Quality Policy Revisions	24
Ridesharing Policy Revisions	28
Regional Transit Development Program Policy Revisions	33
Paratransit Policy Revisions	35
Transit-Section 5 Policy Revision	37
Institutional Arrangements Policy Revisions	38
Financial Policies	39
6.0 Program Text and Actions	
AQMP Text and Actions	41
Ridesharing Text and Actions	56
Regional Transit Development Program Text and Actions	63
7.0 Finance Text and Actions	73
7.A Institutional Arrangement Text and Actions	96
8.0 APPENDICES	
G - Final list of Air Quality measures	106
H - Section (5) Transit Moneys Distribution Agreement	123
I - Major Assumptions and Notes for Finance Section	124
J - Notes on Finance tables	125
K - Air Quality measures finance information	132

executive summary





Digitized by the Internet Archive
in 2024 with funding from
State of California and California State Library

<https://archive.org/details/C124884945>

I. EXECUTIVE SUMMARY

A. Introduction

On October 5th, 1978 the SCAG Executive Committee adopted the 1978 Regional Transportation Plan and accepted the Environmental Impact Report with the understanding that certain amendments to the plan would be made upon the completion of several current planning efforts involving SCAG, the County Transportation Commissions, Imperial Valley Association of Governments (IVAG), and Ventura County Association of Governments (VCAG). These efforts were:

- SCAG-78 (Development Guide)
- Air Quality Management Plan (AQMP)
- Ridesharing Program
- Regional Transit Development Program RTDP Integration Report
- Development of Memoranda of Understanding between SCAG, County Transportation Commissions (CTC's), IVAG, and VCAG
- Proposed paratransit policies
- Section 5 federal transit funding allocation policy

This amendment contains the text, policy, and action changes to the RTP suggested by the above planning efforts along with explanatory narrative and information. In addition, the Financial Chapter has been rewritten to be consistent with these other recommended changes to the RTP.

B. Interrelationship of Amendments

The various planning efforts which are integrated in this amendment package -- especially the Air Quality, Ridesharing, and RTDP amendments -- contain many common elements. The air quality - related amendments contained in this document include the transportation tactics recommended for adoption in the AQMP and supporting policies and actions. Each of the four elements of the RTDP are included in the AQMP as tactics for the achievement of air quality standards; however the principal purpose of the RTDP amendments is to recommend for adoption a long range transit program and a financially-feasible implementation plan. Likewise, certain of the Ridesharing recommendations are included in the AQMP; however the Ridesharing program is broader in that it is aimed at reducing congestion, reducing user costs, and reducing energy consumption as well as improving air quality.

In certain instances a particular policy or action recommendation results from more than one of the planning efforts noted above. Such cases are noted with appropriate cross references.

C. Private Sector

The Ridesharing, AQMP, and Paratransit amendments include significant policy and action recommendations which would expand the role of the private sector in the planning and provision of transportation service. The AQMP amendments also propose a major role for the private sector in achieving air quality standards.

This Regional Transportation Plan (RTP) amendment package recognizes to a far greater extent than previous RTP's the magnitude of the private

sector's involvement in transportation issues and highlights the necessity of greater private - public sector coordination. Greater attention to the private sector role is especially timely in view of the direct and indirect constraints placed on public agencies by Proposition 13.

Significant recommended amendments relating to the private sector include:

- o A requirement that applications for funding of new paratransit operations show that existing operations, public and private, are inadequate. (p. 35)
- o A requirement that applicants for public funds notify public and private operators that might be impacted and consider their comments when proposing new transportation services (p. 35).
- o Additional controls on aircraft and aircraft use (p. 50); and improved emission controls on motor vehicles (p. 46) to reduce air pollution.
- o Electrification of railroad switching yards (p. 53) and improved trucking efficiency (p. 51) to improve air quality.
- o An expanded employer-sponsored ridesharing program. (p. 52)
- o Emissions control technological improvements relative to off-road mobile sources. (p. 53)
- o Relaxation of state PUC regulations governing the establishment of commuter bus service by private operators. (p. 58)
- o Support for taxi-pools (p. 58).
- o Development of low-cost liability insurance for people who use group transportation (p. 32).
- o A program for voluntary retirement of older cars (p. 52).
- o Support for flexible work schedules to facilitate ridesharing and to improve air quality (p. 44).

The following sections summarize key recommendations included in the amendment package. Only those significant changes/additions to currently adopted policies and actions are included in this summary; page number references are provided to indicate where the amendment is fully stated. The sections should be read in their entirety to get a complete picture of the changes proposed.

D. Summary of Regional Transit Development Program (RTDP) Amendments

The amendments include several key recommendations:

- o First, (p. 33) to adopt as part of the long range transit plan for the region the four elements of the RTDP, specifically:

- Element 1 - Transportation Systems Management(TSM)
- Element 2 - Freeway Transit
- Element 3 - Los Angeles Downtown People Mover
- Element 4 - Regional Core Rapid Transit

- o Secondly, to perform the necessary analysis and study to evaluate extension of RTDP to Orange, San Bernardino, Ventura, and Riverside Counties (p. 68). As a guide for such analysis, county-by-county transit objectives are proposed (p. 66).
- o Third, (p. 69) to pursue implementation of a financially feasible program to include:
 - Local Bus/TSM capital improvements (not including expansion of the bus fleet);
 - Construction of Ridesharing lanes in the Santa Ana and Harbor/Century freeway corridors;
 - Construction of the Downtown People Mover (DPM);
 - Construction of the Regional Core Rapid Transit (Wilshire to North Hollywood).
- o Fourth, (p. 90) proposals for securing the financial resources required to implement the RTP including the four elements of the RTDP.

E. Summary of Ridesharing Amendments

The following major policies/actions are recommended:

- o Establishment of ridesharing objectives for light-duty and transit modes. (p. 22)
- o Recommendations to designate and fund a centralized multi-modal information and marketing organization to assist commuters in utilizing, and employers in providing, ridesharing services. (p.30)
- o Expansion of Commuter Computer's matching capacity. (p. 31)
- o Development of adequate, low-cost liability insurance for people who use group transportation. (p. 32)
- o Encouragement to employers for the provision of an equal subsidy treatment of auto drivers, bus riders, carpoolers and van poolers. (p. 32)
- o Establishment of a policy that newly constructed ridesharing lanes will be open to carpools/vanpools as well as buses. (p. 29)
- o Expansion and continuation of the "Come Together" public awareness/information program, with special emphasis on corridors where projects are scheduled for implementation, and on development of ridesharing activities for non-commute trip purposes (p. 59).

F. Summary of Paratransit Amendments

The following paratransit policies are recommended:

- o A requirement that applications for funding of new paratransit justify the need for the new operation and discuss integration with existing services. (p. 35)
- o A requirement that agencies proposing new service notify existing operators that might be impacted by the new service. (p. 35)
- o Support for demonstration projects to test the concept of paratransit service brokerage. (p. 36)
- o Encouragement of local governments and the state PUC to make decisions and adopt regulations and ordinances consistent with RTP. (p. 36)

G. Summary of Institutional Arrangements Amendments

Numerous comments received on the draft 1978 RTP (adopted by the Executive Committee on October 5, 1978) suggested the need for more discussion of institutional arrangements; especially in regards to the relationships between the County Transportation Commissions and SCAG. SCAG and CTC staff have been engaged in a series of discussions over the past few months culminating in a draft Memorandum of Understanding (MOU) outlining these roles and relationships. The amendments proposed here reflect the principles embodied in the draft MOU.

- o CTC's, IVAG, and VCAG are given the responsibility of designating agencies to prepare annual short range transit plans (SRTTP's), including elderly and handicapped elements. (p. 38)
- o The principle that decisions and resolutions of transportation conflicts should be made at the lowest level of government empowered to address the issue. (p. 38)
- o SCAG will assume an advocacy role with state and federal governments to make requirements more responsive to local and regional needs. (p. 105)

H. Summary of AQMP Amendments

The Air Quality Management Plan (AQMP) addresses both mobile and stationary sources. Included in this RTP amendment package are the tactics and policies related to mobile sources designed to attain state and federal air quality standards. Most of the policy/action statements included in this amendment are identical to policy/action statements included in the AQMP. In addition, this amendment package contains certain policy/action statements not included in the AQMP, where such statements are required to further define the role of transportation in the overall air quality effort.

The AQMP amendments are of two types: measures designed to reduce emissions and improve air quality; and policy/action statements necessary to support the implementation of the recommended measures. The latter include recommendations as to how the recommended measures could be financed.

AQMP measures recommended for implementation are listed in Table 1. A full description of each measure is included in Appendix G.

TABLE 1 RECOMMENDED AQMP MEASURES	
A. <u>EXISTING MEASURES</u>	B. <u>NEW MEASURES</u>
<ul style="list-style-type: none"> - modified work schedule - parking management(carpool preferential parking) - employer rideshare program - trip reduction program - increased bicycle and pedestrian facilities - improved emission controls for motor vehicles - traffic signal synchroniza-tion - inspection and maintenance of light duty vehicles - transit improvements - freeway facility and transit improvements supporting HOV - Wilshire rail line - downtown people mover - freeway widening for congestion relief 	<ul style="list-style-type: none"> - increased air passenger load factor - jet engine aircraft ground taxi operation improvements - new piston engine aviation aircraft engine controls - modifying old and new jet aircraft engines to meet proposed 78 federal standards - reduce jet aircraft queueing delays - emission standards for all non-farm heavy-duty off-road vehicles (construction, land fill, etc.) - emission standards for new farm equipment - off-road motorcycle emission standards - electrifying railroad switching yards - improved trucking efficiency - voluntary retirement of older cars - marine fuel transfer operations - marine diesel engine controls

Air quality-related transportation policies/actions are recommended on the following significant issues:

- o Sanctions applied for non-compliance with the State Implementation Plan(SIP) should apply only to those jurisdictions failing to implement their portion of the plan. (p. 26)
- o The Transportation Improvement Program(TIP) will constitute the required commitment to implement and fund transportation control measures. (p. 26)
- o SCAG will develop a plan for public transit improvements designed to meet basic transportation needs, as required by the Clean Air Act. In developing this plan, the definition of "public transportation" will be expanded to include vanpools, carpools, and other shared-ride service. (p. 27)
- o An annual inspection/maintenance program for light duty vehicles is recommended to be implemented. (p. 47)
- o For the purposes of the AQMP, the following categories of funds are considered available to fund emission-reduction and public transportation measures:

UMTA Sec. 3 and 5
FAI, FAP, FAU
TDA
Social Service funds

Transit farebox revenues
Proposition 5 funds
State highway funds
Local gas tax funds

I. Summary of Finance Amendments

The scope of the amendments included in this amendment package was extensive enough to require a complete revision of the Finance Chapter of the RTP (Chapter 7.0), as well as policy/action recommendations.

The principal conclusions of the analysis contained in Chapter 7.0 are:

- o By the early to mid-1980's, non-capital highway costs will exceed state highway user revenues. (p. 80)
- o Based on existing revenues and projected costs, there are insufficient funds to finance the implementation of the RTP and the recommended AQMP transportation-related tactics. The funding shortfall is approximately \$8.6 billion, of which \$6.5 billion are public sector costs and \$2.1 billion are private sector costs. (p. 73)
- o There are not sufficient operating funds to support expansion of the bus fleet. (p. 79)

Based on the analysis of costs and revenues in Chapter 7.0, the following combination of new resources and reallocation of existing resources is recommended to finance mobile source control measures, and transportation system development projects.

- o Gas Tax Indexing Within the SCAG Region. If the price index used is assumed to escalate by 8% yearly, an indexed regional gasoline tax begun in fiscal year 1980 would generate an additional \$1.6 billion in revenue by fiscal year 1988. An indexed gas tax would continue to generate more than \$300 million additional dollars yearly for the region after 1988 (p. 90).
- o Reallocation of Highway User Revenues and UMTA Section 3 Funds to the SCAG Region. A "fair share" return to highway capital funds, and maximum federal contribution for transit capital projects would channel approximately \$3.7 billion into the SCAG region (p. 92).
- o A two cent increase of the local gasoline tax. By increasing the current local gasoline tax of approximately three and one half cents to five and one half cents, an additional \$100 million could be made available yearly for streets and roads expenditures in the region.

J. Section 5 Policy - LA-Long Beach Urbanized Area

The Executive Committee approved the following policy on October 5, 1978:

SCAG will distribute UMTA Section 5 funds between counties in the Los Angeles/Long Beach Urbanized Area according to the following formula: population (60%); revenue vehicle miles (20%); and boardings (20%).

The details of the formula and the conditions which accompany its use are included in Appendix H.

introduction



Recommended Amendments to the 1978 Regional Transportation Plan

II. Introduction

On October 5th, 1978 the SCAG Executive Committee adopted the Regional Transportation Plan and accepted the Environmental Impact Report conditioned by the fact that certain amendments to the plan would be made. These amendments were to be based on current planning efforts involving SCAG, the commissions, IVAG, and VCAG. These efforts were:

- Air Quality Management Plan
- Ridesharing Plan
- Regional Transit Development Program Integration Report
- Memoranda of Understanding (between SCAG, CTC's, IVAG, and VCAG)
- Proposed Paratransit Policies and Actions
- Section 5 Transit Allocation Policy

Format of the Regional Transportation Amendment Document

This document has been formatted in a fashion that will allow both an understanding of evolving programs (i.e., Air Quality, Ridesharing, Regional Transit, Institutional Arrangements, and Paratransit) as well as an understanding of how these programs are affecting changes to certain portions of the Regional Transportation Plan (i.e., to objectives, policies, program narratives and actions).

Chapter I is an executive summary of the amendment package, meant to give both an overview of all the amendment areas as well as highlighting recommendations for key changes.

Chapter II relates the history of the 78 adopted RTP, the legal ability to amend the RTP and the format rationale for the amendment package.

Chapter III presents an overview of work completed to date on the Air Quality Management Plan, Ridesharing Plan, Regional Transit Development Program, Institutional Arrangements, Paratransit Policies, and Transit (Section 5) Finance Allocation Agreements.

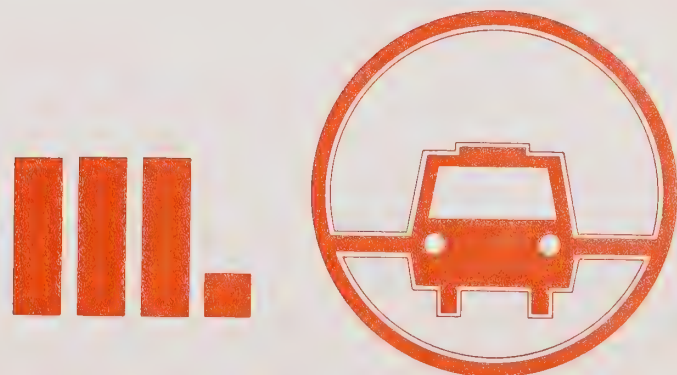
Chapter IV breaks all of the recommended changes down into specific areas relative to the RTP. This includes changes to objectives, policies, program text and actions, and appendices.

For the reader to trace a program through the document it will be necessary to note that although all program overviews are contained in Chapter III, the actual amendments in Chapter IV are broken into specific RTP segments. For example, to find all changes relative to Air Quality, it will be necessary to read the overview in Chapter III, the changed objective in Chapter IV, Section 4, the changed policies in Chapter IV, Section 5, and the revised text and actions in Chapter IV, Section 6. The same holds true for the other five elements.

For detailed information on Air Quality, Ridesharing, Regional Transit Development, and Institutional Arrangements the reader is encouraged to see the following documents (available through SCAG):

- o Draft Air Quality Management Plan (October 1978)
- o Draft Ridesharing Report (November 1978)
- o Draft Regional Transit Development Program Integration Report (November 1978)
- o Draft Memoranda of Understanding between SCAG, the CTC's, IVAG & VCAG (November 1978)

elements of amendments



III. Review of Elements to be Amended Into the RTP

This chapter presents an overview of current work efforts in the areas of growth forecasting, air quality, ridesharing, regional transit development, institutional arrangements, paratransit, and transit Section 5 financing.

A. SCAG-78 Growth Forecast Policy

The Growth Forecast Policy depicts future population, housing, employment, and land use consistent with SCAG's goals and policies, and provides a basis for regional planning in specific areas, such as air quality, housing, transportation, and water quality.

A new growth forecast (Draft SCAG-78 Growth Forecast Policy) has been developed, which, when adopted, will supersede SCAG's current adopted forecast SCAG-76.

The initial step in the development of the Draft SCAG-78 involved the formulation and analysis of six alternative forecasts. The alternatives were assessed for environmental implications, and reviewed by SCAG committees and by the public through workshops and hearings. As a result of the assessment and public input, Draft SCAG-78 was developed in August, 1978. A Draft Environmental Impact Report also accompanied the Draft SCAG-78. Both the Draft SCAG-78 and Draft EIR are currently being reviewed by local governments as well as state and federal agencies. Public workshops and hearings are being held in November and December, 1978.

Based on the public response, revisions to the draft forecast will be made. A final forecast is scheduled for adoption by SCAG's Executive Committee in January, 1979.

The Draft SCAG-78 Forecast was used as a basis for the development of the Air Quality Management Plan and the 208 Areawide Wastewater Treatment Plan. Although SCAG-76 was used as a basis for the development of the Regional Transit Development Plan, future RTDP analysis will be based on SCAG-78.

A comparison between SCAG-76 Modified and Draft SCAG-78 reveals several broad differences. Draft SCAG-78 shows 213,000 or 2% more persons in the region in the year 2000 than does SCAG-76 Modified. Relative to SCAG-76 Modified, Draft SCAG-78 shows significantly more population growth in the Counties of Orange and San Bernardino, and significantly less in Los Angeles County. Draft SCAG-78 is regionally somewhat more dispersed than SCAG-76.

B. Air Quality Management Plan (AQMP)

The Federal Clean Air Act requires that each state adopt a plan (State Implementation Plan, SIP) to achieve and maintain air quality standards -- using, when appropriate, transportation control measures. The Clean Air Act Amendments of 1977 require that the national air quality standards be met by 1982, with a possible extension to 1987 (for oxidant and carbon monoxide). In addition, this new act gives EPA the authority to withhold certain federal funds from the state if an acceptable plan is not developed, implemented, and enforced.

The South Coast Basin Air Quality Management Plan (AQMP) assesses the variety of laws governing air quality planning and program implementation. The final plan meets all statutory requirements and focuses on the single goal of meeting air quality standards. To do so, AQMP staff from the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG), with the assistance of cities and counties, Air Resources Board (ARB), California Department of Transportation, and the Environmental Protection Agency (EPA), have analyzed the underlying conditions affecting air quality, set forth the baseline regulatory framework and emissions associated with this base, projected future population, housing, employment, industrial, and transportation growth, and assessed the emissions likely to result from this growth. Finally, they addressed a variety of proposals which will allow these emissions to be reduced to levels that will attain clean air standards.

Some of these proposals relate to mobile sources of pollution and are entitled Transportation Control Measures. The adoption of a set of these measures in the AQMP will necessitate the attached amendments to the RTP. These amendments make the RTP and the AQMP consistent with each other.

C. Ridesharing Program

In early 1977 the SCAG Executive Committee decided that developing incentives for ridesharing would be an important priority in the region's transportation system. Action was needed in two areas to develop such incentives. First, the public had to become aware of the congestion, energy, cost, and air pollution problems facing the region and the rationale behind various strategies which could address these problems. Second, Southern Californians had to have a meaningful role in planning to meet these problems and in the development of solutions. The Executive Committee felt such actions were lacking in the implementation of the Santa Monica freeway "diamond lane" and did not want to see that experience repeated.

As a result, the Executive Committee authorized staff to pursue a ridesharing public awareness and participation program. The program was to cover transportation-related problems, ridesharing facilities and services, as well as other incentives, and was to solicit input from a wide variety of citizens and interested groups.

At the same time, Caltrans recognized a need for greater public awareness and participation, especially with respect to its required report to the FHWA (Federal Highway Administration) regarding the ultimate status of the north-bound "diamond lane" on the San Diego freeway. Recognizing the advantages of working together, the two agencies made a decision to become joint sponsors of the program and to invite the County Transportation Commissions and other transportation agencies to become more involved as well. These agencies now comprise the Ridesharing Steering Committee, which is the mechanism for managing the program and working together on the problems confronting the entire region. Teamwork not only produces a better product by incorporating the strengths of each agency's expertise, but also provides more effective results where a consensus of opinion is reached.

The period for developing the work plan of the ridesharing program culminated near the end of 1977. In January 1978, the regionwide awareness portion of the program was initiated. The focus of this effort was to reach as many people as possible, regionwide, with the ridesharing message. This included the development of a wide range of collateral materials such as a film, slide show, brochure, portable displays, public service announcements and billboards.

Simultaneously, the agencies began to develop the community-level awareness and participation effort. In order to maximize resources, nine Community Liaison Areas (CLAs), which represented a cross section of demographic characteristics in the region, were selected for an intensive involvement effort. This part of the program also included special training of an interagency ridesharing team in both the technical aspects of ridesharing and communication/public involvement skills requisite to a major effort of this type. In April 1978, the regionwide awareness and community-level involvement efforts were brought before the public in a kick-off press conference. These efforts will continue through the end of 1978. In August, a private-sector employer program was begun and will also continue through the end of the year. To date, over 2,000 people have attended meetings at which Come Together ridesharing presentations were made and the program's exhibits have been displayed at fairs which have attracted over 500,000 people.

The goal of these efforts was to provide information on ridesharing options and to learn from the public which of the ridesharing options are most acceptable.

An analysis of the information gathered through the involvement program, as well as further refinement of the technical feasibility of the ridesharing options, is being done during the fall of 1978. The public's preference for the different ridesharing options is being evaluated in light of the technical and financial feasibility of implementing these options in the various communities. In 1979, the partner agencies in the Come Together ridesharing program are planning to implement a second phase regionwide awareness program, a set of ridesharing demonstration projects, additional community involvement activities, and research to develop further the potential for ridesharing in Southern California.

Preliminary analysis of the public's responses leads to the conclusion that while there is support for many of the ridesharing facility and service improvements, these improvements alone are not the only way to encourage ridesharing. While these improvements will generate a certain amount of ridesharing, additional actions are needed to insure that the facilities and services are used to their maximum potential. Rather than solely focusing on the "supply" of more transportation facilities and services, it is important now to focus on maximizing the "demand" side of ridesharing.

Social interaction and convenience are prime considerations in the decision to rideshare. Social interaction can be facilitated by taking a more personalized approach to promoting ridesharing. This can be accomplished through a strong employer-based program (which draws on the informal communication network which exists among employees at the place of work) and through a community-based program (which draws on neighborhood organizations). In addition, both these programs would offer the opportunity to make ridesharing more convenient (through the establishment of neighborhood park/ride lots, or preferential parking at the place of work). In order to have an impact on the demand side of ridesharing, it is recommended that both types of programs be undertaken in the next phase of the ridesharing program.

The current ridesharing program has been focusing on the commute trip because it is easiest to influence behavior on regular trips and because it is trips in the peak hours that do the most to aggravate the problems of congestion, air pollution and energy consumption. While this focus should continue (to be tied in with the employer program) there is an additional need to examine how ridesharing can be encouraged for non-commute trips. This could be accomplished through both a home-based program as well as through focusing on major trip-generating activity centers.

Finally, while transportation agencies agree that certain facilities and service improvements are needed or should be implemented, there is a continuing need to involve citizens of southern California in the process and to provide information to the community on these improvements and how they contribute to solving some of our transportation problems.

D. Regional Transit Development Program

Background

The 1977 Regional Transportation Plan endorsed preliminary engineering and environmental analysis relating to a Regional Transit Development Program (RTDP) that would consist of the following elements.

Element I - Transportation Systems Management (TSM)

This addresses improvements to the current bus system. Strategies include bus priority programs, modernization of capital facilities and the expansion of transit service levels.

Element II - Freeway Transit

This involves the development of a bus-on-freeway rapid transit system which utilizes the existing freeway network with sections of exclusive lanes similar to the El Monte Busway.

Element III - Los Angeles Downtown People Mover

This is a proposed distribution/circulation system located in the central business district of Los Angeles.

Element IV - Regional Core Rapid Transit

This involves a rapid transit facility to serve the regional core area encompassing downtown Los Angeles, The Wilshire Corridor, Hollywood and North Hollywood.

In December of 1976, the U.S. Secretary of Transportation approved the funding of preliminary engineering and environmental analysis for the RTDP. The federal share of the Downtown People Mover construction costs was also approved pending local funding support and environmental clearances.

Technical Analysis of RTDP Elements

A substantial amount of analysis and evaluation has been undertaken for each of the RTDP elements. These are described as follows:

TSM

SCRTD developed a document entitled Transit TSM Element of the RTDP: First Annual Report, which discusses short-term improvements to the current bus system. These include transit priority strategies, modernization of capital facilities, the development of community transit, and the possible expansion of transit service levels.

Freeway Transit

The Freeway Transit Plan Refinement Study evaluated several alternatives for providing bus-on-freeway rapid transit. The report recommends constructing rideshare lanes on the Harbor Freeway and/or the Santa Ana

Freeway and the Century (I-105) Freeway as the initial phase in implementing a complete system.

Downtown People Mover

The City of Los Angeles Community Redevelopment Agency has completed a Draft Environmental Impact Report on a proposed 2.7-mile-long automated guideway system to operate between the Convention Center and Union Station.

Regional Core Rapid Transit

SCRTD has completed its Draft Report on the Regional Core Transit Alternatives Analysis. The SCRTD Board of Directors has recommended implementation of Alternative 2, a rail line subway 18 miles in length from downtown Los Angeles out Wilshire Boulevard to Fairfax Avenue, and north to North Hollywood in the San Fernando Valley.

The RTDP Integration Report

SCAG, working through the Interagency Technical Committee and the Interagency Coordinating Committee and in close cooperation with staffs of the County Transportation Commissions and the implementing agencies, has prepared an RTDP Integration Report. This report integrates the work done on each of the elements and makes recommendations as to what should be implemented. Two basic recommended plans emerge from the evaluation and analysis of the RTDP elements. These are:

I. The RTDP

This is recommended for plan adoption although increased funding must be sought to accomplish it. Chapter 7 discusses possible methods of obtaining this increased funding. The program consists of:

- o Implementation of various TSM programs and projects which would include a moderate expansion of transit service levels.
- o Development of rideshare lanes (designed for possible conversion to rail) on the following freeways - Santa Ana (downtown Los Angeles to Route 91), Harbor (I-10 to I-105 with stations located south of I-105 to San Pedro), Hollywood (downtown Los Angeles to North Hollywood), Ventura (Hollywood Freeway to Reseda Boulevard), Santa Monica (downtown Los Angeles to La Cienega), Century (I-105) from LAX to I-605, San Diego (US 101 to the Marina Freeway), extension of El Monte Busway from its current western terminus to Union Station.
- o Construction of the Los Angeles downtown people mover that would include inter-modal transfer facilities at the Convention Center and Union Station.

- o Construction of an 18-mile rail rapid transit line from downtown Los Angeles along Wilshire to Fairfax Avenue, north on Fairfax to Hollywood and through the Cahuenga Pass to North Hollywood.

II. The Financially Feasible Implementation Program

This is the first phase of the RTDP. The elements included in this program can be implemented without additional funding beyond anticipated levels. The program consists of the following:

- o Implementation of various TSM programs that would not involve expansion of service beyond current levels.
- o Development of rideshare lanes (designed for possible conversion to rail) on the Santa Ana Freeway (downtown Los Angeles to I-605), the Harbor Freeway (I-10 to I-105 with stations south of I-105 to San Pedro), the Century Freeway (LAX to I-605), and the extension of the El Monte Busway from its current western terminus to Union Station.
- o Construction of the Los Angeles downtown people mover that would include intermodal transfer facilities at the Convention Center and Union Station.
- o Construction of an 18-mile rail rapid transit line from downtown Los Angeles along Wilshire Boulevard to Fairfax Avenue, north on Fairfax to Hollywood, and through the Cahuenga Pass to North Hollywood.

Future RTDP-related Planning

The RTDP, as currently developed, addresses transit improvements in Los Angeles County. It is recommended that the region's transportation planning work program include the necessary analysis and study that would evaluate the development of the RTDP in Orange, Riverside, San Bernardino, and Ventura Counties.

Amendments to the Regional Transportation Plan based on the RTDP Integration Report are listed in Section IV.

E. Institutional Arrangements

The transportation planning and programming process in the SCAG region has become more complex in recent years with the advent of new legislation and administrative regulations, and the county transportation commissions. Defining where the transportation planning and programming responsibilities lie is of utmost importance to the region.

SCAG has a number of mandated roles and responsibilities in the area of transportation systems planning and regional transportation improvement programming. The county transportation commissions similarly have statutory roles and responsibilities focusing on transportation programming. Many of these responsibilities are closely interrelated and the need exists to clarify and further define them.

Clarifying and defining roles and relationships has been an important subject of discussion among the key transportation planning and programming actors. A framework of defining roles and relationships has emerged in the form of proposed memoranda of understanding between SCAG and agencies in each of the region's counties. The basic intent of the memoranda is to define roles and relationships for meeting respective transportation planning and programming responsibilities. Participants who have been working with SCAG to complete the memoranda of understanding include the Los Angeles County Transportation Commission, Orange County Transportation Commission, Riverside County Transportation Commission, San Bernardino Associated Governments/County Transportation Commission, Imperial Valley Association of Governments, Ventura County Association of Governments, and California Department of Transportation.

The areas being covered in the memoranda of understanding include the following:

the planning process (preparation of the Overall Work Program)

transportation planning (preparation of the Regional Transportation Plan/Environmental Impact Report and Short Range Transit Plans as well as Transportation/Air Quality Management Plan Coordination)

transportation programming (preparation of the Transportation Improvement Program, administration of the Transportation Development Act and UMTA Section 5 programs, and carrying out the A-95 review process)

transportation coordination and monitoring (coordination of public transit operations and monitoring RTP and TIP implementation.

Amendments to the RTP reflecting work on the memoranda of understanding are shown in Chapter IV. Other ongoing efforts to define and clarify institutional arrangements and relationships are discussed as well.

F. Paratransit

SCAG's Paratransit Task Force was formed in December, 1976 to work with public and private demand-responsive transportation service providers, planners, and regulators. Since that time, the Task Force has examined a number of problem areas pertaining to private sector concerns and paratransit coordination. The Task Force has made findings regarding these problems and developed recommendations to alleviate them. As a result, policies and actions were recommended for adoption and inclusion in the amendment to the Regional Transportation Plan. These policies and actions are listed in Section IV.

G. Section 5 Allocation Policy (Los Angeles/Long Beach Urbanized Area)

On June 2, 1977, the SCAG Executive Committee directed staff to develop a new procedure/formula for allocating UMTA Section 5 funds in the Los Angeles/Long Beach urbanized area. Since that time, SCAG, the involved county transportation commissions, and the transit operators have extensively discussed alternative approaches to these allocations.

These discussions have resulted in a joint recommendation by the staffs of SCAG and the Los Angeles, Orange, and San Bernardino Transportation Commissions. The Executive Committee reviewed and adopted a formula for distributing these funds at its October 5, 1978 meeting. Amendments to the Regional Transportation Plan relative to the allocation formula are contained under Section IV.

amendments by chapter to rtp

IV.



Amendments to the Regional Transportation Plan

This section lists recommended amendments to the Regional Transportation Plan. The amendments, which stem from the planning efforts described earlier, are broken down to fit into segments of the existing RTP. These segments include the following:

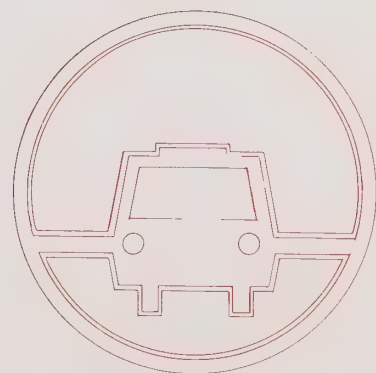
- Objectives (RTP/Chapter 4.0)
- Policies (RTP/Chapter 5.0)
- Actions (RTP/Chapter 6.0)
- Finance (RTP/Chapter 7.0)
- Institutional Arrangements (RTP/New Chapter 7.A)
- Appendices (RTP/Appendices G/H/I/)

Where objectives, text, policies, or actions replace their existing counterparts, the existing wording is given or cited by page. Upon adoption of the amendments, all changes will be reprinted as inserts to the currently adopted 1978 RTP; and policies and actions currently un-numbered in this document will be given numbers and pages.

The subchapters are so numbered (4.0) as to correspond to the existing Regional Transportation Plan.

objectives

4.0



4.0 This section elaborates on proposed changes and additions to objectives in air quality and ridesharing.

4.3.1

Existing Air Quality Objective

The following air quality objective, adopted in the 1977 RTP, is being re-evaluated in the development of the Air Quality Management Plan (AQMP) [see Section 6.1.2]:

Table 4.3-1

Mobile-Source Emission Reduction Objectives South Coast Air Quality Maintenance Area

EMISSION-REDUCTION OBJECTIVES (TONS PER DAY)				NOMINAL PERCENTAGE OF LIGHT DUTY VEHICLE EMISSIONS
Year	NMHC	NOx	CO	
1980	13	16	132	5%
1985	15	17	70	10%
1990	21	23	112	15%
1995	25	31	135	20%
NMHC-Non-Methane Hydrocarbons NOx - Nitrogen Oxides CO-Carbon Monoxide				

This RTP objective pertains to reductions of emissions from all mobile sources. To relate the adopted objectives to an indicator of mobility, they are expressed as nominal percentages of the projected emissions from light-duty vehicles. However, the measures to achieve the emission reductions will involve virtually all categories of mobile sources, both on-road and off-road.

The measures currently being proposed to reduce mobile-source emissions are listed in Appendix G. They have been developed for the transportation elements of the AQMP, which will be adopted in February 1979. It is anticipated that the RTP will be amended to reflect the adopted mobile-source measures of the AQMP to achieve consistency between the two plans for the region. The measures proposed for the AQMP are expected to result in substantially greater emission reductions than those listed in Table 4.3-1.

4.3.1

Recommended New Air Quality Objective

The following objective represents a reevaluation of the previous objective. As a study objective, a 40% emissions reduction from all mobile sources was evaluated. This approach was taken because it was discovered that non-light-duty vehicles, particularly certain off-road vehicles, were growing sources of emissions. Analysis of the study objective and development of the Air Quality management Plan altered and established the following objective for the South Coast Air Basin. An objective for Ventura County and Southeast Desert Air Basin portions of the SCAG Region has not been developed.

It is recommended that mobile sources at a minimum reduce emissions (expressed in tons per day) by 1987 according to the following table:

Table 4.3-1

1987 Emission Reduction Potential of Transportation Control Measures			
Source	RHC	NO _x	CO
On-Road	154.7	189.4	1406.5
Off-Road	52.4	44.37	246.7
Total Mobile	207.7	223.77	1653.2

RHC = Reactive Hydrocarbons

NO_x = Nitrogen Oxides

CO = Carbon Monoxide

The emission reductions were developed through the AQMP process which selected measures, regardless of source category (i.e., stationary or mobile) based on the cost effectiveness, emission-reduction potential, reasonable availability, and related impact criteria. This competitive process resulted in the selection of those measures which best met the reduction objectives necessary to satisfy federal clean air standards by 1987. Those emissions listed in Table 4.3-1 when added to stationary measures satisfy the standards. As the review process proceeds, a tradeoff policy will be used. If one of the recommended measures is removed, it will be replaced by another comparable (in terms of emissions-reduction potential) measure or measures based on the above criteria and process, and the emission-reduction objective will change accordingly, depending on whether the replacement measure is on-road, off-road, or stationary. It should be noted that those reductions presented in Table 4.3-1 exceed the mobile source's fair share allocation of the reductions necessary. To be specific, the transportation measures emission reductions represent 67% of the RHC, 65% of the NO_x, and 100% of the CO targets.

4.3.4

Recommended New RTP Ridesharing Objectives

The SCAG region light-duty vehicle rideshare objective is defined as:

By 1987 increase the average light-duty vehicle occupancy for the daily, freeway/ non-freeway, home to work trip from 1.2 to 1.3. Achieve this increase in average vehicle occupancy by diverting approximately 735,000 work commuters from single-occupant to rideshare modes (i.e., 3+ person carpools or its equivalent), thusly, forming 245,000 new carpools and 490,000 daily carpool vehicle trips.

It is intended that, by 1987, those weekday light-duty vehicle trips identified have as 24-hour home-based work trips (utilizing both freeway and non-freeway segments of the transportation network), an average vehicle occupancy of 1.3. In order to realize this average vehicle occupancy, it will be necessary to divert approximately 735,000 work commuters from the single-occupant vehicle mode to the multiple occupant (i.e., 3+ person carpool or its equivalent) mode of travel -- in addition to the 328,000 work commuters expected to form carpools naturally. It is assumed that these 735,000 ridesharers, formed into some 245,000 3+ person carpools and representing approximately 490,000 daily carpool trips, can be captured by means of an Employer Program aimed primarily at commuter matching and promotional activities (i.e., contributing 639,000 new ridesharers and 213,000 carpools) and a Freeway Facility Change Program featuring rideshare incentives such as rideshare lanes and metered ramp bypass lanes (i.e., contributing 96,000 new ridesharers and 32,000 carpools). This objective is the same as the level called for in the AQMP.

Capture rates for the Employer Program are expected to vary according to the size of the firm and may require incentives in addition to matching/promotion in order to be realized. Listed below are the capture rates for firms of various sizes which are expected to be achieved by 1987.

<u>Size of Firm</u> <u>(Number of Employees)</u>	<u>% Captured</u> <u>to Ridesharing (3+ carpools)</u>
500 and above	20
250 - 499	15
100 - 249	10
1 - 99	2.5

These rates represent targets and actual capture rates will vary from these figures (e.g., one firm of 500 may have a capture rate of 10% while another firm of 500 may have a capture rate of 30%).

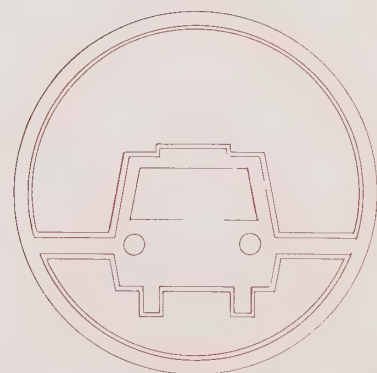
The SCAG region transit rideshare objective is defined as:

By 1990 increase transit ridership by 700,000 to 1,000,000 new transit trips daily. This increase will be achieved primarily by diverting between 350,000 to 500,000 additional work commuters from single-occupant mode to transit. This increase would account for 1.7% of all daily person trips.

Transit facility and service improvements will result in an increase in transit trips from the current level of 3.36% to 4.3% of all person trips (see Transit Ridership Objective 4.3.3). In order to meet the 6% modal split objective for the region it will be necessary to successfully implement or continue several ridesharing options. It is anticipated that the implementation of these non-facility ridesharing activities (especially a marketing and information program, an expanded employer incentive program and parking management programs) will contribute to increasing transit ridership by the amount stated above.

policies

5.0



5.0 This section elaborates on recommended changes and additions to policies in Air Quality, Ridesharing, Regional Transit Development, Paratransit, Transit Financing (Section 5), and Institutional Arrangements.

5.1.5 TRANSPORTATION/AIR QUALITY POLICIES

Modification of Existing RTP Policies

To find all the air quality related policies, it will be necessary to review Ridesharing, Regional Transit Development, Institutional Arrangements, and Financial policies. The following lists only changes to Air Quality policies or recommended new Air Quality policies. Other Air Quality policies that have not been changed may still be found in the adopted 1978 RTP. An asterisk preceding a policy indicates that it is from the South Coast Air Quality Management Plan.

RTP Policy #33, p. 5-5

The Regional Transportation Plan and the Air Quality Management Plan will be consistent with each other.

* Recommended Change RTP Policy #33, p. 5-5

The Regional Transportation Plan and the Transportation Improvement Program shall be consistent with the Air Quality Management Plan as the applicable portion of the State Implementation Plan.

RTP Policy #34, p. 5-5

Transportation systems planning within the SCAG region shall work cooperatively with the regional Air Quality Maintenance Planning process to attain federal and state health standards for ambient air quality at the earliest achievable date, and to maintain the standards thereafter.

Recommended Change RTP Policy #34, p. 5-5

Transportation systems planning within the SCAG region shall work cooperatively with the regional Air Quality Maintenance Planning process to attain federal and state ~~health~~ standards for ambient air quality at the earliest achievable date, and to maintain the standards thereafter.

RTP Policy #37, p. 5-5

Air pollution from transportation sources shall be reduced by shifting a substantial number of single-passenger auto trips to carpools, transit, and other modes; meeting the vehicles emissions inspection and maintenance program; considering extension of emission standards to off-road vehicles and other presently unregulated sources.

(and) RTP Policy #41, p. 5-5

Reduce automobile emissions and fuel consumption by developing specific programs designed to:

- 1) reduce the region's reliance on automobiles,
- 2) improve travel conditions by relieving congestion and bottlenecks where effective,
- 3) increase the average occupancy of the automobile.

(combined) Recommended Change RTP Policy # , p.

Air pollution from mobile sources shall be reduced by the development and implementation of programs and actions in the following areas:

- the diversion of a substantial number of single-passenger auto trips to carpool, vanpool, transit and other modes. (See Rideshare objectives.)
- * - the encouragement of a reduction in individual daily vehicle trip-making through land use, urban design, and marketing techniques.
- improvement to the efficiency of the automobile by
 - instituting an annual emissions inspection and maintenance program
 - improving bottlenecks and points of congestion in the road system
 - encouraging technical improvements to vehicle design and operation
 - applying emissions standards and operational improvements to off-road vehicles and currently unregulated sources.

(and) Recommended Change RTP Policy # , p.

Alternative modes of travel should be planned and provided for to reduce the region's reliance on the automobile.

RTP Policy #38, p. 5-5

Continue the existing transportation control program with the objective of reducing emissions.

* Recommended Change RTP Policy #33, p. 5-5

SCAG shall commit to the implementation of all adopted transportation control measures, and to the implementation of public transportation measures sufficient to meet basic transportation needs. This commitment shall be executed through exercise of A-95 review authority and TIP review/approval authority to the extent authorized by state and federal statutes.

RTP Policy #42, p. 5-5

Reduce automotive emissions and fuel consumption by actively encouraging improvements in the technical characteristics of the vehicle.

Recommended Change RTP Policy # , p.

(Now contained in revisions in Policies #37 and #41.)

Recommended New Air Quality RTP policies

* Recommended New RTP Policy # , p.

Sanctions applied to transportation funds for noncompliance with appropriate portions of the State Implementation Plan (SIP) should apply only to those jurisdictions not implementing their portion of the plan.

* Recommended New RTP Policy # , p.

The adopted Regional TIP Annual Element shall constitute the required commitment by state, regional, and local agencies, to implement and fund adopted transportation control and public transportation measures.

* Recommended New RTP Policy # , p.

In the case of transportation control measures and public transportation improvements which have been previously programmed, implementation should be given priority and newly adopted measures should be phased into the TIP as expeditiously as possible.

* Recommended New RTP Policy # , p.

Any selected transportation control measure (TCM) may be replaced by any other emission-reduction measure provided the effectiveness is greater or equal to the measure replaced as demonstrated through appropriate technical analysis.

Recommended New RTP Policy # , p.

SCAG will encourage the use of alternative fuels for transportation energy conservation and emission-reduction potential.

* Recommended New RTP Policy # , p.

As a part of the FY 79-80 regional planning effort, SCAG, in cooperation with County Transportation Commissions and transit operators, will develop and document in the RTP a plan for long- and short-range transportation improvements designed to meet basic public transportation needs. This plan will be implemented according to the schedule adopted with that plan.

* Recommended New RTP Policy # , p.

All forms of multi-occupant vehicles and paratransit systems shall be considered public transportation if such vehicles or systems are supported directly or indirectly by public funds.

5.1.3

RIDESHARING POLICIES

(These policies are listed by issues)

I. BYPASS LANES

Existing RTP Policy #17 p. 5-3

Implement the freeway exclusive lanes and freeway ramp metering program for buses and carpools where consistent with policies and criteria in the Regional Transportation Plan. Exclusive lane projects should:

- have local support
- be operationally safe
- be capable of serving and encouraging carpooling, vanpooling, and transit use
- serve as an incentive and benefit all freeway users
- be undertaken where a freeflow condition cannot be reasonably achieved.

Recommended Change RTP Policy #17 p. 5-3

Encourage ridesharing by providing bypass lanes at metered ramps at locations determined to be feasible and desirable. These lanes should:

- have support from both citizens and local elected officials
- be operationally safe
- be capable of serving and encouraging either carpooling, vanpooling or the use of buses.

Existing RTP Policy #19 p.5-4

Increase the efficiency of freeway lanes by including by-pass lanes for high-occupancy vehicles on at least 50% of the metered freeway ramps.

Recommended RTP Policy

Eliminate policy.

II. EXCLUSIVE LANES

Existing RTP Policy #18 p. 5-3

In designing and building new facilities, evaluate the impact of including exclusive bus, van and carpool lanes.

Recommended Change RTP Policy

In planning new freeways, evaluate the impact of including exclusive bus, van and carpool lanes.

Existing RTP Policy #17 p. 5-3

Implement the freeway exclusive lanes and freeway ramp metering program for buses and carpools where consistent with policies and criteria in the Regional Transportation Plan. Exclusive lane projects should:

- have local support
- be operationally safe
- be capable of serving and encouraging carpooling, vanpooling, and transit use
- serve as an incentive and benefit all freeway users
- be undertaken where freeflow conditions cannot be reasonably achieved.

Recommended Change RTP Policy

Where rideshare lanes meet the following criteria and are consistent with the policies in the Regional Transportation Plan, then projects should be implemented. These projects should:

- have support from both citizens and local elected officials
- be operationally safe
- be open to all forms of high occupancy vehicles
- serve as an incentive to rideshare and benefit all freeway users
- be undertaken where freeflow condition cannot be reasonably achieved or it can be shown that a rideshare lane will carry at least as many people as a conventional lane.

Existing RTP Policy #20 p. 5-3

Encourage cities and counties to include exclusive lanes for high-occupancy vehicles on major arterials for peak-hour travel.

Recommended Change RTP Policy #20 p. 5-3.

Encourage cities and counties to include exclusive lanes for buses, carpools and vanpools on major arterials for peak-hour travel and to enforce related parking restrictions to insure unobstructed use of these lanes by high occupancy vehicles.

III. PARK AND RIDE SERVICE; PARK AND RIDE LOTS; PARK AND POOL LOTS

Existing RTP Policy #25 p. 5-4

Support the use of park-and-ride lots as transfer points connecting feeder transit and bus-on-freeway service.

Recommended Change RTP Policy

Expand the use of existing park-and-ride and park-and-pool lots to serve as connecting points for all available types of high-occupancy vehicles.

Existing RTP Policy (None)

Recommended New RTP Policy # p.

Support development of transfer centers which improve the interface of various transportation modes and encourage the use of high-occupancy vehicles.

IV. REVISED OPERATING STRATEGIES

Existing RTP Policy #24 p.5-4

Identify the need for, and support development of public and private paratransit services, as well as needed changes in legislation.

Recommended Change RTP Policy

Support development of public and private paratransit services (such as taxipools, demand-responsive and community level service) which encourage ridesharing on short trips and support any needed changes in legislation and regulation.

VII. RIDESHARING BROKERAGE

Existing RTP Policy (None)

Recommended New RTP Policy # p.

Support development of a centralized multi-modal information and marketing organization which will assist commuters in utilizing, and employers in sponsoring ridesharing services. Such an organization should be regional in scope, a non-provider of transportation services and quasi-governmental or private entity.

VIII. RIDESHARE MATCHING

Existing RTP Policy (None)

Recommended New RTP Policy # _____ p. _____

Support the expansion of Commuter Computer's ability to provide ridesharing match lists and to provide these lists in a expeditious manner so that potential ridesharers can be assisted quickly.

IX. RIDESHARE PROMOTION

Existing RTP Policy #23 p. 5-4)

Support an extensive and coordinated marketing program to improve the im age of ridesharing.

Recommended Change RTP Policy #23 p. 5-4

Support an extensive and coordinated marketing program to increase public awareness of transportation problems and encourage ridesharing as an immed-iate action to alleviate the problems.

X. PARKING MANAGEMENT

Existing RTP Policy #21 p. 5-4

Encourage local governments to develop parking strategies that increase the use of high-occupancy vehicles.

Recommended Change RTP Policy #21 p.5-4

Cities and counties should develop parking programs which encourage the voluntary reduction in the supply of off-street parking spaces. Commer-cial and industrial businesses should be offered the option to reduce both code required and conditionally required parking in exchange for their commitment to implement measures that will encourage a reduction in the use of the singly occupied automobile. Any reduction in parking should be dependent upon both the nature and the effectiveness of measures that participating businesses would be willing to implement.

XI. GOVERNMENTAL, LEGAL, ECONOMIC INCENTIVES

Existing RTP Policy (None)

Recommended New RTP Policy # p.

Support the development of adequate, low-cost liability insurance for people who use group transportation.

Existing RTP Policy (None)

Recommended New RTP Policy # p.

Support changes in the tax code which permit employer sponsored ridesharing program costs as a legitimate business deduction and do not consider these costs as income to the employee.

Existing RTP Policy #22 P.5-4

Encourage employers to provide bus passes for employees, sponsor carpools, vanpools, and subscription bus service and consider using flextime.

Recommended Change RTP Policy #22 p.5-4

Encourage both public agencies and private employers to provide bus passes for employees, sponsor carpools or vanpools, provide subscription bus service, assign preferential parking spaces for ridesharing vehicles, institute flextime and to consider using fleet vehicles as means of facilitating ridesharing for commute trip purposes.

Existing RTP Policy (None)

Recommended New RTP Policy # p.

Encourage public and private employers to provide equal subsidy treatment of auto drivers, bus riders, carpools and vanpoolers.

Existing RTP Policy (None)

Recommended New RTP Policy # , p.

Encourage cities and counties to develop locally implementable projects which encourage the use of high occupancy vehicles such as bus turn-outs, off-street parking programs, signal pre-emptions and other related programs.

Existing RTP Policy (None)

Recommended New RTP Policy # p

For the purposes of AQMP, all forms of multi-occupant vehicles and para-transit systems shall be considered public transportation if such vehicles or systems are supported directly or indirectly by public funds.

TRANSIT (REGIONAL TRANSIT DEVELOPMENT PROGRAM) POLICY CHANGES & ADDITIONS

EXISTING RTP POLICY #2 p. 5-7

The following guideway projects are of equally high priority for Proposition 5 funding of planning and preliminary engineering costs:

The Southern California Rapid Transit District's Regional Transit Development Program "Starter line" (In addition to previous planning and preliminary engineering)

- The City of Los Angeles downtown people-mover.

Recommended Change RTP Policy #2, p. 5-7

The following guideway projects are of equally high priority for Proposition 5 funding:

- The Southern California Rapid Transit District's rail rapid transit line from downtown Los Angeles to North Hollywood.
- The City of Los Angeles' downtown people mover.

Note: Proposition 5 funds are applicable only to Los Angeles County.

Recommended New RTP Policy #7A, p. 5-8

Support development of the RTDP as part of the long-range transit plan for the region. This is contingent upon an increase in funding availability. The complete Program includes the following:

- Element I: Local Bus/TSM Improvements (Including Service Expansion).
- Element II: Full Freeway Transit Program. Includes construction of rideshare lanes and stations, as well as the implementation of service improvements. The rideshare lanes will be designed to permit possible conversion to rail.
- Element III: Construction of Downtown People Mover.
- Element IV: Construction of Rail Rapid Transit Line from Downtown Los Angeles to North Hollywood.

Also support development of a financially feasible RTDP implementation program which can be implemented within anticipated funding constraints.

(Continued on p. 34)

This program includes the following:

- Element I: Local Bus/TSM Improvements (does not include service expansion).
 - Element II: Construction of rideshare lanes on the Santa Ana, Harbor, and Century Freeways, and the extension of the El Monte Busway from its current western terminus to Union Station. Rideshare lanes will be designed to permit possible conversion to rail.
 - Element III: Construction of Los Angeles Downtown People Mover.
 - Element IV: Construction of Rail Rapid Transit Line from downtown Los Angeles to North Hollywood.
-

RECOMMENDED PARATRANSIT POLICIESExisting RTP Policy #8 p.5-8

Transit and paratransit operators shall coordinate their planning and programming with other agencies, including city and county traffic and engineering departments.

This can be accomplished by:

- a) efforts to bring providers of similar transportation services together to discuss coordination and consolidation strategies;
- b) the development of joint powers agreements and contractual arrangements between service providers;
- c) requiring applicants for new paratransit operations to show that existing resources are inadequate, and explain how new services will be integrated with existing services.

Recommended Change RTP Policy #8 p.5-8

The CTC's, IVAG, & VCAG shall encourage transit and paratransit operators to coordinate their planning and programming with each other, and with other agencies concerned with transportation. SCAG will aid this process by:

- a) requiring that applications for funding of new paratransit operations show that existing resources are inadequate and discuss how the requested funds might be used to expand existing public and private sector services or, where integration is not feasible, state the reasons why.
- b) fostering the development of joint powers agreements and contractual arrangements between service providers.
- c) supporting efforts which bring providers of similar transportation services together to discuss coordination and consolidation strategies.

Existing RTP Policy #13, P.5-9

Communication between the private sector and all public bodies involved in decisions on transportation issues should be actively encouraged, particularly in the early stages of the development process.

Recommended Change to RTP Policy #13 p.5-9

Agencies applying for public funds will notify affected public or private operators early in the development process and consider their comments when proposed new transportation programs would impact their services or afford opportunities for coordination. Planning agencies will see that lists of existing services are made widely available.

NEW PARATRANSIT POLICY RECOMMENDATIONS

Recommended New RTP Policy # p.

Brokerage

SCAG, the CTCs, and the subregional agencies will support demonstration projects as appropriate, that develop and evaluate brokerage projects for community-level transportation services.

Recommended New RTP Policy # p.

Private Sector Participation

SCAG will maintain the Paratransit Task Force and actively encourage that participation in the transportation planning process also be afforded to representatives of private transportation providers at the subregional level.

Recommended New RTP Policy # p.

Local Transportation Regulations Consistency

The transportation regulations of local governments should be consistent with the Regional Transportation Plan. Local governments are encouraged to draft paratransit ordinances, or revised taxi ordinances, which permit shared-ride taxi service, independent driver contracting, less restrictive insurance provisions, and regulatory coordination.

Recommended New RTP Policy # p.

PUC/RTP Coordination

The State Public Utilities Commission should be encouraged to make decisions and adopt regulations which are consistent with the Regional Transportation Plan.

5.3

TRANSIT FINANCE (Section 5)

Existing RTP Policy #11, p. 5-19

Section 5 moneys for transit service in the Los Angeles/Long Beach urbanized area will be based on SCAG Executive Committee agreement through FY 1980; thereafter, allocations will be based on an agreed-upon allocation policy.

Recommended Change RTP Policy #11, p. 5-19

SCAG will distribute UMTA Section 5 funds between counties in the Los Angeles/Long Beach urbanized area according to a formula which includes population and travel-system factors. (The details of the formula and the conditions which accompany its use are appended in Appendix H.)

INSTITUTIONAL ARRANGEMENTS POLICIESExisting RTP Policy #20 p. 5-10

Each public transit operator will prepare a Short Range Transit Plan (SRTP) as required to meet federal guidelines.

Recommended Change RTP Policy #20 p. 5-10

Agencies designated by the CTC's, IVAG, and VCAG shall prepare a Short Range Transit Plan (SRTP) as required to meet federal guidelines.

Existing RTP Policy #24 p. 5-10

SCAG's endorsement of applications for state and federal transit funding shall be contingent upon implementation of the revised Memorandum of Understanding and consistency with Regional Transportation Plan.

Recommended Change RTP Policy #24 p. 5-10

SCAG's endorsement of applications for state and federal transit funding shall be contingent upon implementation of the Public Transit Operator Memorandum of Understanding and consistency with Regional Transportation Plan.

NEW INSTITUTIONAL ARRANGEMENTS POLICIESRecommended New RTP Policy #1 p. 521A

Decisions and resolution of transportation conflicts should be made at the lowest level of government empowered to address the issue.

Recommended New RTP Policy #2 p. 521A

Agreements should be reached between SCAG, Caltrans, CTC's, IVAG, VCAG, and transit operators which are intended to eliminate duplication of effort; fix responsibilities with agencies best qualified to do the work; improve coordination; and ensure the appropriate delegation of responsibilities to the county transportation commissions and other designated subregional agencies.

Recommended New RTP Policy #3 p. 521A

Streamline the transportation planning, programming and project review process to minimize review time and red tape.

5.10

FINANCIAL POLICIES

Recommended New RTP Policy # , p.

Secure sufficient funding from all levels of government to implement the actions, programs, and projects contained within the Regional Transportation Plan.

Recommended New RTP Policy # , p.

Encourage the most cost efficient use of funds in each modal area.

Recommended New RTP Policy # , p.

No funds shall be allocated or expended for capital projects unless there is a reasonable expectation that sufficient funds will be available for maintenance and operating costs.

Recommended New RTP Policy # , p.

New sources of funds should be levied at the lowest, most appropriate, level of government.

Recommended New RTP Policy # , p.

Programming of projects in the Annual Element of the Regional Transportation Improvement Program (TIP) by state or local agencies shall be deemed a commitment of necessary local funds to implement.

Recommended New RTP Policy # , p.

Agencies, jurisdictions, or districts receiving federal funds for capital projects which are offset by the Air Quality Management Plan and would otherwise be required to have air mitigation will support and assist in the implementation of the air quality measures and policies recommended.

Recommended New RTP Policy # , p.

Additional highway user revenues should be generated through indexing of the State Gasoline Tax.

Existing RTP Policy #2 p. 5-7 (See also RTDP Section)

The following guideway projects are of equally high priority for Proposition 5 funding of planning and preliminary engineering costs:

- The Southern California Rapid Transit District's Regional Transit Development Program "Starter line" (In addition to previous planning and preliminary engineering)
- The City of Los Angeles downtown people-mover.

Recommended Change RTP Policy #2, p. 5-7

The following guideway projects are of equally high priority for Proposition 5 funding:

- The Southern California Rapid Transit District's rail rapid transit line from downtown Los Angeles to North Hollywood.
- The City of Los Angeles' downtown people mover.

Note: Proposition 5 funds are applicable only to Los Angeles County.

Existing RTP Policy #11, p. 5-19

Section 5 moneys for transit service in the Los Angeles/Long Beach urbanized area will be based on SCAG Executive Committee agreement through FY 1980; thereafter, allocations will be based on an agreed-upon allocation policy.

Recommended Change RTP Policy #11, p. 5-19

SCAG will distribute UMTA Section 5 funds between counties in the Los Angeles/Long Beach urbanized area according to a formula which includes population and travel-system factors. (The details of the formula and the conditions which accompany its use are appended in Appendix H.)

Existing RTP Policy #9, p. 5-18

The allocation of Section 5 funds for FY 75, 76, and 77, is available to each operator for the annual element year plus two years following.

Recommended Change RTP Policy # , p.

(DROP)

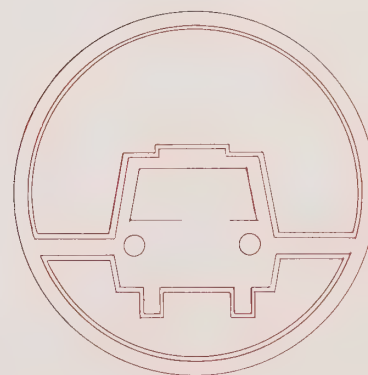
Recommended New RTP Policy # _____ p. _____

For the purposes of the AQMP, the following categories funds shall be considered available to fund adopted transportation control measures, and to fund public transportation measures to meet basic transportation needs:

- o All funds available under Section 5 of the Urban Mass Transportation Act of 1964 as amended.
- o All funds available under Section 3 of the Urban Mass Transportation Act of 1964 as amended.
- o To the extent necessary to support required capital improvements, and the extent allowed by law, Federal Aid Primary and Federal Aid Interstate highway funds.
- o To the extent necessary and to the extent allowed by law, Federal Aid Urban highway funds.
- o To the extent necessary and to the extent allowed by law, Transportation Development Act (TDA) funds. This policy does not apply to TDA funds allocable to areas outside the non-attainment area.
- o All fare box and other operating revenues.
- o To the extent necessary and allowed by law, Proposition 5 funds.
- o Funds flowing through the State Highway Account from all sources including transfers from the Department of Motor Vehicles Account.
- o Local gas tax funds excepting those funds required for maintenance and safety.
- o Social service funds for transportation purposes including but not limited to UMTA 16 (b)(2) funds.

program text
and action

6.0



6.1.2 Transportation and Air Quality

During the last two years, SCAG, in cooperation with the South Coast Air Quality Management District, CALTRANS, local governments and other agencies, has been developing an Air Quality Management Plan for the South Coast Air Basin. A similar plan has been prepared in Ventura County by the Ventura County Environment/Air Management Agency. Desert portions of the SCAG region will have Non-Attainment Plans prepared which indicate how these areas will attain the federal ambient air quality standards. Each of these plans, once approved by the state and federal governments, will represent revisions to the required State Implementation Plan.

These plans are required to consider transportation control measures and to recommend those which are to be implemented. Congress, in the 1977 Clean Air Act Amendments, included 18 control measures that have to be considered for implementation.

The Clean Air Act also includes numerous other requirements which impact local governments and transportation decisions significantly. These include:

- o Commitments to implement approved control measures.
- o Commitments to do additional analysis of measures as required.
- o Commitments to use all available resources to establish, expand, or improve public transportation to meet basic transportation needs.
- o Expeditious programming of and priority for transportation control measures and public transportation measures in Transportation Improvement Programs.
- o Implementation of an Inspection/Maintenance Program if an area cannot meet standards by 1982.
- o The Regional Transportation Plan and Improvement Program must conform with the approved State Implementation Plan.

If the air quality plans noted above are not completed within a congressionally mandated schedule and/or the requirements of the Clean Air Act are not met, the Act would preclude the awarding of certain federal transportation funds under Title 23, United State Code (as well as other federal funds). These sanctions would not apply to transportation projects under that title for safety, mass transit, or transportation projects related to air quality improvement or maintenance.

In addition to sanctions against federal funds, the Act would also prohibit the granting of any permit allowing new emission sources to be started in the region, thus blocking commercial, industrial, and other types of growth.

Because of the significance of these issues and the contribution of mobile sources to the total air quality problem, SCAG, the County Transportation Commissions, subregional transportation planning agencies, Caltrans, transit operators, and local governments have joined with air quality control agencies to prepare the plans discussed above and prepare a coordinated approach to these and other (i.e., State Lewis Air Quality Act) requirements. An extensive interagency process was developed in the South Coast Air Basin with SCAG and the South Coast Air Quality Management District sharing co-lead responsibilities for the AQMP. Subregional agencies (counties) assisted by elected officials of selected cities, the County Transportation Commissions and SCAG prepared subregional inputs to the AQMP. SCAG prepared growth forecasts, land use, transportation and energy inputs. The SCAQMD prepared stationary-source inputs. An extensive public involvement process was also developed and utilized in preparing the plan.

To date, the conclusion of the South Coast AQMP is that standards for oxidant, nitrogen dioxide, and carbon monoxide could be met by 1987 but not by 1982. An extension of time will be necessary to attain these standards.

The emission reductions in the AQMP are based on the implementation of a set of mobile- and stationary-source measures. The AQMP listed over 100 measures for possible reductions. They were ranked on the basis of cost per ton reduction and evaluated for other impacts. This list was circulated among the public, elected officials, and the technical community. A consensus was generally forming around the recommended measures. These measures were then submitted to the decision-makers for final decisions on incorporation.

Currently, 26 mobile-source and 36 stationary-source measures are included in the South Coast AQMP. These include technological controls on vehicles or mobile-source equipment, improvement to or management of the transportation system, and technical controls on stationary sources.

Air Quality Actions

Table 6-1 lists the mobile source control measures that have been recommended as part of the South Coast Air Basin Air Quality Management Plan. The measures are shown in two columns. Column A includes those measures which already have some implementation actions contained in the 1978 RTP. Recommended revisions to those actions are shown on the following pages.

Column B shows those measures which will require new actions to be added to the RTP. These additions immediately follow the recommended revisions noted above.

Other financially-related air quality actions can be found in the financial section, page 93.

TABLE 6-1
Recommended Mobile Source Control Measures from the
South Coast Air Quality Management Plan Measures

A. <u>EXISTING MEASURES</u>	B. <u>NEW MEASURES</u>
<ul style="list-style-type: none">- modified work schedule- parking management(carpool preferential parking)- employer rideshare program- trip reduction program- increased bicycle and pedestrian facilities- improved emission controls for motor vehicles- traffic signal synchronization- inspection and maintenance of light duty vehicles- transit improvements- freeway facility and transit improvements supporting HOV- Wilshire rail line- downtown people mover- freeway widening for congestion relief	<ul style="list-style-type: none">- increased air passenger load factor- jet engine aircraft ground taxi operation improvements- new piston engine aviation aircraft engine controls- modifying old and new jet aircraft engines to meet proposed 78 federal standards- reduce jet aircraft queueing delays- emission standards for all non-farm heavy-duty off-road vehicles (construction, land fill, etc.)- emission standards for new farm equipment- off-road motorcycle emission standards- electrifying railroad switching yards- improved trucking efficiency- voluntary retirement of older cars- marine fuel transfer operations- marine diesel engine controls

A. Measures with Existing RTP Actions and Recommended Revisions (Measures denoted by asterisks are included in the South Coast Air Basin Air Quality Management Plan)

* MODIFIED WORK SCHEDULE

RTP Action #7 p 6-6

Expand existing information campaign and other measures to encourage employer-sponsored Rideshare programs such as: carpooling, vanpooling, subscription bus service, public transit use and flextime to facilitate schedule flexibility for ridesharers. Urge employers to provide free bus passes and carpool/vanpool subsidies equivalent to their current parking subsidies for the single occupant vehicle.

Recommended Change: RTP Action # , p.

SCAG, the CTCs and Caltrans will work to expand existing employer sponsored ridesharing programs to meet the objectives set forth in Section 4.3.4. To accomplish this objective, the agencies will assist public and private employers in providing bus passes for employees, sponsoring carpools or vanpools, providing subscription bus service, assigning preferential parking spaces for ridesharing vehicles, instituting flextime and using fleet vehicles for ridesharing purposes.

(Also add:) Recommended New RTP Action #, p.

SCAG will work with both private and public sector employers to develop an educational program designed to encourage both staggered work hours and four-day, 40-hour work weeks.

* PARKING MANAGEMENT (CARPOOL PREFERENTIAL PARKING)

RTP Action #1 p 6-6

Endorse preferential treatment for high-occupancy vehicles, including exclusive lanes on freeways and arterials where consistent with adopted criteria, bypass lanes for on-ramps, and preferential parking.

Recommended Change: RTP Action # , p.

SCAG, the CTCs and Caltrans will work to expand existing employer sponsored ridesharing programs to meet the objectives set forth in Section 4.3.4. To accomplish this objective, the agencies will assist public and private employers in providing bus passes for employees, sponsoring carpools or vanpools, providing subscription bus service, assigning preferential parking spaces for ridesharing vehicles, instituting flextime and using fleet vehicles for ridesharing purposes.

* EMPLOYER RIDESHARE PROGRAM

RTP Action # 7, p. 6-6

Expand existing information campaign and other measures to encourage employer-sponsored VMT reduction programs, such as carpooling, van pooling, subscription bus service, public transit use and flextime to facilitate schedule flexibility for ridesharers. Urge employers to provide free bus passes and carpool/vanpool subsidies equivalent to their current parking subsidies for the single occupant vehicle.

Recommended Change: RTP Action # , p.

SCAG, the CTCs and Caltrans will work to expand existing employer sponsored ridesharing programs to meet the objectives set forth in Section 4.3.4. To accomplish this objective, the agencies will assist public and private employers in providing bus passes for employees, sponsoring carpools or vanpools, providing subscription bus service, assigning preferential parking spaces for ridesharing vehicles, instituting flextime and using fleet vehicles for ridesharing purposes.

(Also add:) New Recommended RTP Action # , p.

For the purposes of expanding employer-sponsored rideshare programs, seek the development on either a demonstration or permanent basis of a centralized ridesharing marketing and information agency oriented toward employers and commute trips. As part of this effort, support funding for an expansion of existing computerized service information and rideshare matching.

* TRIP REDUCTION PROGRAM

RTP Action #2, p. 6-6

(For action supporting this program, also see Ridesharing, Transit, and Development Guide Actions and Policies.)

Recommended Change RTP Action , p.

- SCAG, in cooperation with other appropriate agencies, will develop a media/educational program aimed at maintaining the current daily automobile trip-making level.
- SCAG and other appropriate agencies will evaluate alternative methods for local government implementation of automobile trip reductions (i.e., land use planning, circulation, home goods delivery).
- SCAG, in cooperation with local government, will identify demonstration projects to be tested for automobile trip reduction effectiveness.

* INCREASED BICYCLE AND PEDESTRIAN FACILITIES

Existing RTP Action # 6-71, p. 1

Coordinate bicycle planning, implementation, and safety programs among all participants in the transportation planning process.

Recommended Change RTP Actions # , p.

(Keep, but add the following four actions:)

- SCAG and the CTCs will encourage cities and counties to use available SB 821 bicycle and pedestrian facilities funds in support of projects which discourage auto use.
 - SCAG will seek increased funding, from private, local, state and federal sources, for bicycle and pedestrian facilities, through its legislative/administrative advocacy program.
 - SCAG, the CTCs, and Caltrans will encourage and support promotional programs to increase the provision for and use of bicycle and pedestrian facilities.
 - SCAG will encourage cities and counties to consider amending zoning, subdivision and building ordinances to require the provision of bikepaths, over-crossings and pedways, bike racks and other facilities to encourage walking and bicycle riding.
-

* IMPROVED EMISSION CONTROLS FROM MOTOR VEHICLES

Existing RTP Action # 1, p. 6-11

Endorse California Emission Standards for light-duty vehicles.

Recommended Change RTP Action # , p.

Drop and add the following:

- SCAG will seek ARB administrative action to revise emission standards as defined in the AQMP for on-road vehicles beginning with the 1983 model year.
-

* TRAFFIC SIGNAL SYNCHRONIZATION

Existing RTP Action #1, p. 6-2

TSM activities:

1. Traffic operations improvements
 - o Freeway operations improvements, including ramp metering
 - o Traffic signal system improvements
 - o Traffic channelization
 - o Creation of one-way streets

Recommended Change RTP Action # , p

(Keep the preceding, but add:)

SCAG, CALTRANS, CTCs and local governments will identify candidate high volume intersections for signal synchronization. These intersections should form clusters of contiguous, interconnected systems and should build upon those intersections already having such systems.

SCAG, in cooperation with CTCs and implementing agencies, will investigate additional funding for signal synchronization and prepare necessary recommendations to obtain such funding.

* INSPECTION AND MAINTENANCE OF LIGHT DUTY VEHICLES

RTP Action #3, p. 6-11

Endorse a mandatory annual inspection/maintenance program for light-duty vehicles in the South Coast Air Basin as one method of achieving the objectives for air quality improvements with the provisions that the Riverside program be closely monitored for cost/effectiveness prior to implementation in 1979.

Recommended Change RTP Action # , p.

SCAG endorses the California Legislature's adoption of legislation to permit implementation of an annual vehicle inspection maintenance program in the South Coast Air Basin. This program would require full mandatory inspection of light duty vehicles at State supervised inspection stations using loaded tests.

Recommended New RTP Action # , p.

SCAG, in conjunction with the South Coast Air Quality Management District and other interested agencies, will prepare a legislative advocacy campaign to promote state enabling legislation for an annual inspection/maintenance program.

SCAG will prepare information to encourage governmental entities to initiate an immediate voluntary inspection/maintenance program for their fleet vehicles until a mandatory program is in operation.

* TRANSIT IMPROVEMENTS

Existing RTP Action #21, p. 6-20

Element I - Transportation System Management (TSM)

21. Appropriate transit operators will:

- a) maintain and rehabilitate the existing fleet and fixed facilities (null system);
- b) as additional funds become available for expanded operations: expand the local service fleet by several hundred additional buses by 1983 (650 additional buses for SCRTD, and additional buses for other transit operators in accordance with Short Range Transit Plan expansion options).
- c) implement priority service improvements on arterials (see TSM actions);
- d) expand community-level services as demand warrants.

Recommended Change RTP Action #21, p. 6-20

Element I - Transportation System Management (TSM)

21. Transit operators will

- a) Maintain existing levels of service;
 - b) develop convenient transfer facilities to encourage greater transit utilization;
 - c) modernize transit facilities and equipment including revenue vehicles;
 - d) implement, in conjunction with appropriate City and County of Los Angeles agencies, transit priority programs on arterials;
 - e) develop community transit services when appropriate.
-

* WILSHIRE RAIL LINE

Existing RTP Action #24, p. 6-21

Element IV - Regional Core Rapid Transit

24. SCRTD will design and construct a grade-separated rapid transit facility serving the high activity Wilshire-North Hollywood corridor, to be integrated with the freeway transit and downtown people-mover elements of the RTDP.

Recommended Change RTP Action #24, p. 6-21

Element IV - Regional Core Rapid Transit

24. SCRTD will design and construct a rail rapid transit line from downtown Los Angeles along Wilshire Boulevard to Fairfax Avenue, north on Fairfax to Hollywood, and through the Cahuenga Pass to North Hollywood. This will be integrated with the Freeway Transit and downtown people-mover elements of the RTDP.

* FREEWAY FACILITY AND TRANSIT IMPROVEMENTS SUPPORTING HOV

Existing RTP Action #22, p. 6-20

Element II - Freeway Transit

22. Caltrans, local agencies, and appropriate transit operators will:

- a) conduct preliminary engineering and EIR/EIS work on several first-stage sub-elements, including the busway on the Harbor Freeway and the busway on the Santa Ana Freeway, as additional funds become available.
- b) place in express service approximately 1000 high-capacity buses to provide a high level, bus rapid transit system over the regional freeway network;
- c) to achieve the desired high level transit service (35 to 55 mph speeds), either meter mixed flow freeway traffic to freeflow condition or, where extreme congestion warrants, construct 64 miles of exclusive busway facilities.

Recommended Change RTP Action #22, p. 6-20

Element II - Freeway Transit

22. Caltrans will develop rideshare lanes (designed for possible conversion to rail) on the following freeways:

- a) Harbor Freeway (from I-10 to I-105 with stations south of I-105 to San Pedro),
- b) Santa Ana Freeway (from downtown Los Angeles to I-605),
- c) Century Freeway (from LAX to I-605),
- d) Extension of El Monte Busway from its current western terminus to Union Station.

LOS ANGELES DOWNTOWN PEOPLE MOVER

Existing RTP Action #23, p. 6-21

Element III - Los Angeles Downtown People Mover

23. The City of Los Angeles will design and construct a 2.7 mile automated guideway people mover extending through downtown City of Los Angeles from Union Station in the North to the LA Convention Center in the South, interfacing with intercity rail, rail rapid transit (RTDP Element IV) and the freeway transit system (Element II).

Recommended Change RTP Action #23

Element III - Los Angeles Downtown People Mover

23. The City of Los Angeles will design and construct a downtown people mover that would include intermodal transfer facilities at Union Station and the Convention Center.

* CONGESTION RELIEF FREEWAY WIDENING

Existing RTP Action #9, p. 6-35

This section lists state highway construction priorities submitted by County Transportation Commissions, VCAG and IVAG (see Table 6.4.3). These priorities include only new freeways/ expressways and widening projects that exceed \$200,000 in cost. From these lists a regional list of priorities will be developed. These priorities will be used as guidelines for establishing priorities for major state highway projects in the FY 1979-1980 TIP.

9. SCAG to complete the Highway Evaluation Report and establish priorities for the regional highway system.

(Keep the above action, but add both actions below:)

Recommended Change RTP Action # , p.

SCAG will promote expeditious implementation of currently programmed (in the TIP) widening projects which relieve peak hour congestion by seeking additional funding for such projects.

Recommended Change RTP Action # , p.

SCAG, in conjunction with CALTRANS, CTCs and affected agencies, will evaluate additional widening projects to determine impacts, costs and effectiveness of reducing emissions and improving mobility. (Approximately 300-400 lane miles of freeway widenings have been identified as candidate proposals by CALTRANS.)

B. NEW MEASURES

* INCREASED AIR PASSENGER LOAD FACTOR

Recommended New RTP Action # , p.

SCAG will establish a task force of airline representatives of commercial airlines, airport operators, and regulatory agencies to determine specific implementation actions to achieve an average load factor of 70%. Recommendation for action to be made by July, 1979.

* REDUCE JET AIRCRAFT QUEUEING DELAYS

Recommended New RTP Action # , p.

SCAG will utilize the task force of representatives of commercial airlines, airport operators and regulatory agencies to develop an implementation program which will reduce aircraft delays and excessive idle/taxi operations while on the ground. Recommendations for action to be made by July 1981 with implementation by appropriate agencies or firms prior to 1983.

The airlines and regulatory agencies should evaluate existing operating procedures and flight schedules to minimize the taxi and queueing delays. Control of landings, and increased use of gate holds should be given high consideration. In addition, airport operators should design airport expansion and construction based on shorter taxi distances, reduced airplane ground congestion and runway configurations which minimize ground delay.

* JET AIRCRAFT GROUND TAXI IMPROVEMENTS

Recommended New RTP Actions, # , p.

SCAG will seek assurances from FAA that it will initiate a technical feasibility study (if necessary) in FY 81 to determine impacts of modifying engine speeds during aircraft idling and reducing the number of in-operation engines during taxiing.

The FAA should prepare, in conjunction with the affected agencies, an operating procedure for each type of aircraft in use. This procedure should include RPMs for engine, numbers of engines to be used, and allowances for reduced taxi speeds if necessary.

* MARINE DIESEL ENGINE CONTROLS (RETARDATION OF FUEL INJECTION TIMING)

Recommended New RTP Action # , p.

The SCAQMD should develop appropriate rules requiring marine diesel engine manufacturers and operators to install fuel injection timing systems.

* OFF ROAD/MOTORCYCLE EMISSION STANDARDS

Recommended New RTP Action # , p.

SCAG will seek ARB administrative action to set standards for off-road motorcycles requiring all 1983 model year 2-stroke motorcycles to meet a 1.6 gm/mi standards for HC exhaust emissions through its legislative/administrative advocacy program.

* IMPROVED TRUCKING EFFICIENCY

Recommended New RTP Action # , p.

SCAG will encourage the ICC (Interstate Commerce Commission) and the Public Utilities Commission to revise their deadhead regulations to decrease the number of empty backhauls by proprietary and non-proprietary trucking operations.

Recommended New RTP Action # , p.

SCAG will evaluate alternative incentives for the trucking industry to reduce empty backhauling for selected freight movements.

Recommended New RTP Action # , p.

SCAG, in cooperation with the California Trucking Association and other appropriate trucking interests, will evaluate methods to develop a centralized brokerage-dispatching system to increase the trucking fleet average load.

* VOLUNTARY RETIREMENT OF OLDER VEHICLES

Recommended New RTP Action # , p.

The Legislature should authorize through legislation the actions listed below and appropriate sufficient funds to carry out these actions.

- The Air Resources Board will initiate a program wherein they will offer to purchase for \$450 vehicles 12 years or older registered in the South Coast Air Basin whose owners voluntarily want to sell them.
- The Air Resources Board will utilize the private sector car dealers to the maximum extent possible and provide incentives for their involvement in this program.
- The Department of Motor Vehicles will substantially increase the registration fee for out-of-state vehicles 10 years or older coming into the South Coast Air Basin.
- The Department of Motor Vehicles will reduce to \$1 the registration fee for vehicles that replace those sold to the state through this program.
- The enabling legislation should authorize the State Board of Equalization to waive the sales tax normally levied on a vehicle purchase when that vehicle is replacing one sold to the state through this program.

Recommended New RTP Action #, p.

The SCAQMD and ARB should seek private sector funding of this program and allow it as a stationary source offset action.

Recommended New RTP Action # , p.

SCAG will seek implementation of actions related to voluntary retirement of older vehicles through its legislative/administrative advocacy program.

* ELECTRIFY RAILROAD SWITCHING YARDS

Recommended New RTP Action # , p.

SCAG will seek federal/state/private sector financial support of feasibility studies for the electrification of railroad switching yards.

Recommended New RTP Action # , p.

SCAG will seek commitments from the major railroad companies owning/operating classification/switching yards at Colton, East L. A. (Hobart Yard), South Central L.A. (Watson Yard) and the Harbor Service Railway at Port Hueneme, Long Beach, and Port of L.A. to convert those yards to electric power pending the results of detailed feasibility studies.

* EMISSION STANDARDS FOR NON-FARM HEAVY-DUTY OFF-ROAD VEHICLES

Recommended New RTP Actions # p

ARB should establish exhaust emission standards for all new non-farm heavy-duty off-road vehicles comparable with standards for highway heavy-duty trucks.

Recommended New RTP Action # , p.

SCAG will promote new standards for non-farm heavy-duty off-road vehicles through its legislative/administrative advocacy program.

* EMISSION STANDARDS FOR NEW FARM EQUIPMENT

Recommended New RTP Action # p

ARB should establish new exhaust emission standards for all new farm equipment similar to those promulgated for on-road heavy-duty equipment.

Recommended New RTP Action # p

SCAG will promote new standards for new farm equipment through its legislative/administrative advocacy program.

* MARINE FUEL TRANSFER OPERATIONS

Recommended New RTP Action # p

The SCAQMD should develop appropriate regulation requiring marine operators to control organic emissions released during in-harbor and dockside transfer of petroleum products through appropriate vapor recovery systems.

Recommended New RTP Action # p

SCAG, in cooperation with CALTRANS, CTCs, subregional agencies and local governments where appropriate will continue to analyze and recommend other measures which may be desirable to reduce mobile source emissions.

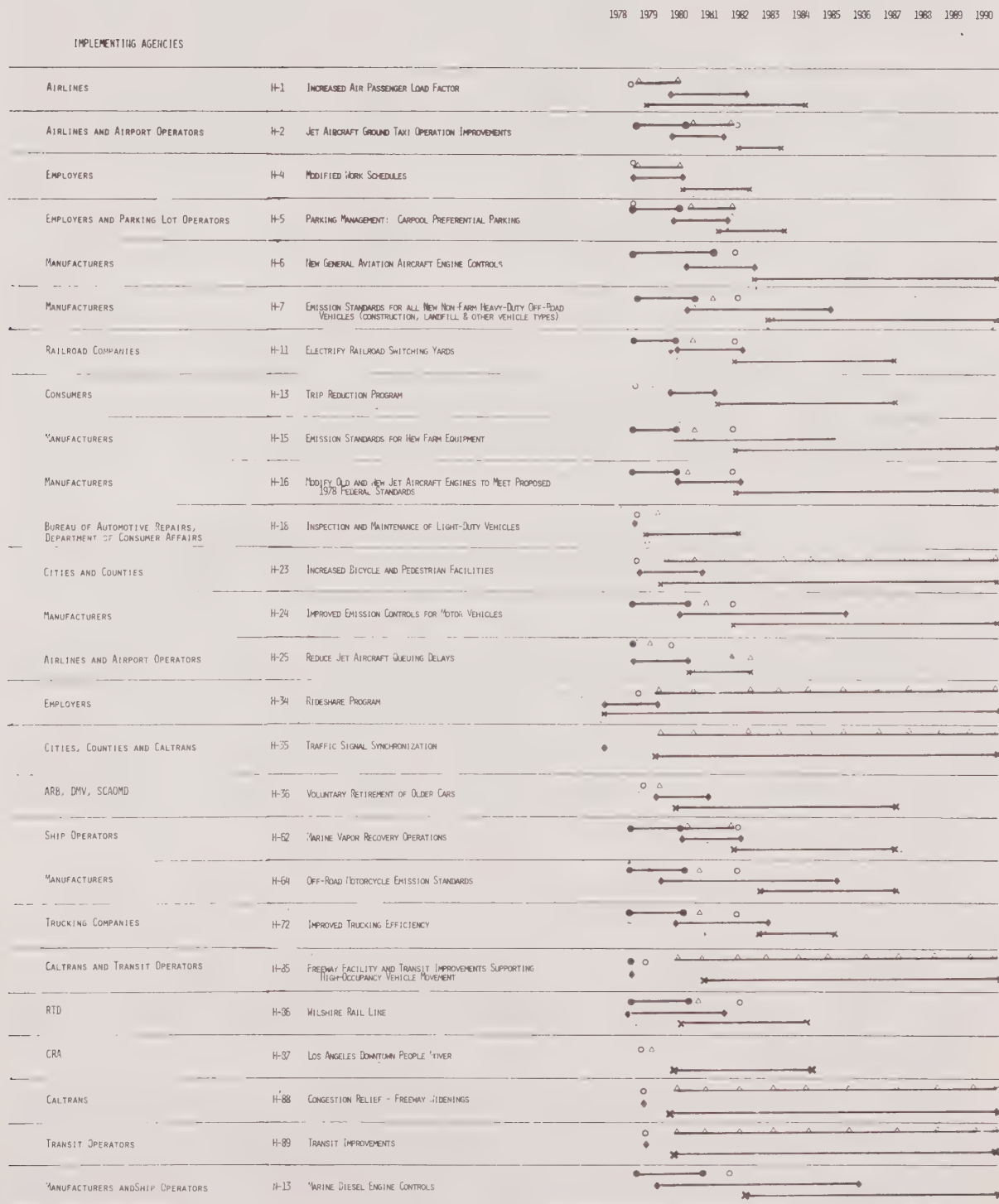
IMPLEMENTATION SCHEDULE FOR AIR QUALITY MEASURES

Recommended New RTP Actions # p

SCAG, through its monitoring and review responsibilities, will direct adherence to, and provide progress reports on, implementation of air quality measures on the schedule shown in Table 5.1-1 on page 55.

TABLE 5.1-1

SOUTH COAST AIR BASIN AQMP
DRAFT IMPLEMENTATION SCHEDULE
FOR
PRELIMINARY STAFF RECOMMENDATIONS
OF
MOBILE SOURCE EMISSION-CONTROL MEASURES



LEGEND

● Study Recommended

◆ Development - Technical

△ Adoption - Legal

○ Plan Submission & Acceptance - State, EPA

✕ Implementation - Public, Private

6.1.1

Ridesharing Program

The following text and actions are recommended to replace portions of the Ridesharing Program as described on pages 6-3 through 6-7 of the adopted 1978 Regional Transportation Plan.

In early 1977, the SCAG Executive Committee decided that developing incentives for ridesharing would be an important priority in the region's transportation system. Action was needed in two areas to develop such incentives. First, the public had to become aware of the congestion, energy, cost, and air pollution problems facing the region and the rationale behind various strategies which could address these problems. Second, Southern Californians had to have a meaningful role in planning to meet these problems and in the development of solutions. The Executive Committee felt such actions were lacking in the implementation of the Santa Monica freeway "diamond lane" and did not want to see that experience repeated.

As a result, the Executive Committee authorized staff to pursue a ridesharing public awareness and participation program. The program was to cover transportation-related problems, ridesharing facilities and services, as well as other incentives, and was to solicit input from a wide variety of citizens and interested groups.

At the same time, Caltrans recognized a need for greater public awareness and participation, especially with respect to its required report to the FHWA (Federal Highway Administration) regarding the ultimate status of the north-bound "diamond lane" on the San Diego freeway. Recognizing the advantages of working together, the two agencies made a decision to become joint sponsors of the program and to invite the County Transportation Commissions and other transportation agencies to become more involved as well. These agencies now comprise the Ridesharing Steering Committee, which is the mechanism for managing the program and working together on the problems confronting the entire region. Teamwork not only produces a better product by incorporating the strengths of each agency's expertise, but also provides more effective results where a consensus of opinion is reached.

The period for developing the work plan of the ridesharing program culminated near the end of 1977. In January 1978, the regionwide awareness portion of the program was initiated. The focus of this effort was to reach as many people as possible, regionwide, with the ridesharing message. This included the development of a wide range of collateral materials such as a film, slide show, brochure, portable displays, public service announcements and billboards.

Simultaneously, the agencies began to develop the community-level awareness and participation effort. In order to maximize resources, nine Community Liaison Areas (CLAs), which represented a cross section of demographic characteristics in the region, were selected for an intensive involvement

effort. This part of the program also included special training of an interagency ridesharing team in both the technical aspects of ridesharing and communication/public involvement skills requisite to a major effort of this type. In April 1978, the regionwide awareness and community-level involvement efforts were brought before the public in a kick-off press conference. These efforts will continue through the end of 1978. In August, a private-sector employer program was begun and will also continue through the end of the year. To date, over 2,000 people have attended meetings at which Come Together ridesharing presentations were made and the program's exhibits have been displayed at fairs which have attracted over 500,000 people.

The goal of these efforts was to provide information on ridesharing options and to learn from the public which of the ridesharing options are most acceptable.

An analysis of the information gathered through the involvement program, as well as further refinement of the technical feasibility of the ridesharing options, is being done during the fall of 1978. The public's preference for the different ridesharing options is being evaluated in light of the technical and financial feasibility of implementing these options in the various communities. In 1979, the partner agencies in the Come Together ridesharing program are planning to implement a second phase regionwide awareness program, a set of ridesharing demonstration projects, additional community involvement activities, and research to develop further the potential for ridesharing in Southern California.

Preliminary analysis of the public's responses leads to the conclusion that while there is support for many of the ridesharing facility and service improvements, these improvements alone are not the only way to encourage ridesharing. While these improvements will generate a certain amount of ridesharing, additional actions are needed to insure that the facilities and services are used to their maximum potential. Rather than solely focusing on the "supply" of more transportation facilities and services, it is important now to focus on maximizing the "demand" side of ridesharing.

Social interaction and convenience are prime considerations in the decision to rideshare. Social interaction can be facilitated by taking a more personalized approach to promoting ridesharing. This can be accomplished through a strong employer-based program (which draws on the informal communication network which exists among employees at the place of work) and through a community-based program (which draws on neighborhood organizations). In addition, both these programs would offer the opportunity to make ridesharing more convenient (through the establishment of neighborhood park/ride lots, or preferential parking at the place of work). In order to have an impact on the demand side of ridesharing, it is recommended that both types of programs be undertaken in the next phase of the ridesharing program.

The current ridesharing program has been focusing on the commute trip because it is easiest to influence behavior on regular trips and because it is trips in the peak hours that do most to aggravate the problems of congestion, air pollution and energy consumption. While this focus should continue (to be tied in with the employer program) there is an additional need to examine how ridesharing can be encouraged for non-commute trips. This could be accomplished through both a home-based program as well as through focusing on major trip-generating activity centers.

Finally, while transportation agencies agree that certain facilities and service improvements are needed or should be implemented, there is a continuing need to involve citizens of southern California in the process and to provide information to the community on these improvements and how they contribute to solving some of our transportation problems.

RIDESHARING ACTIONS

The following recommended Ridesharing actions are in two categories: those that are new, and those that replace existing actions.

Recommended New RTP Action # , p

SCAG, the CTCs, transit operators, and affected local governments will identify 3-5 locations for testing alternatives to traditional park-ride/express bus service. Such alternatives might include provision of public subscription bus service, private commuter bus service or changes in public transit labor contracts which permit the use of part-time drivers. Implementation of service, on a trial basis, will begin in FY 80.

Recommended New RTP Action # , p

For the purpose of expanding employer-sponsored ridesharing programs, SCAG, Caltrans and other transportation agencies will develop a centralized ridesharing marketing and information agency oriented towards employers and the commute trip. Such an agency will be identified and operational not later than January 1, 1980.

Recommended New RTP Action # , p

SCAG and the CTCs will work with the Public Utilities Commission to develop a mechanism for providing private commuter bus operators interim authority to start new routes.

Recommended New RTP Action # , p

SCAG and the CTCs will work with local governments, taxi operators, and Commuter Computer to test the feasibility of the taxipool concept.

Recommended New RTP Action # , p

SCAG, the CTCs and Commuter Computer will work with the PUC, State Insurance Board and the Los Angeles Area Chamber of Commerce to develop adequate, low-cost liability insurance for owners, operators and users of group transportation.

Recommended New RTP Action # , p

SCAG, the CTCs and Caltrans will work to amend the State Constitution to permit Caltrans to develop park-ride or multi-modal lots.

Recommended New RTP Action # , p

SCAG, the CTCs and Caltrans will explore new methods of providing tax incentives to employers, commuters and service operators to encourage ridesharing and will also publicize changes in tax legislation which relate to ridesharing.

Recommended New RTP Action # , p

SCAG, the CTCs and Caltrans will continue the current Come Together program, including efforts to increase general awareness on the problems of air pollution, congestion, energy consumption and user costs as well as specific ridesharing options.

These agencies will examine in greater detail the actual cost of driving alone versus ridesharing and increase public awareness of true costs. As part of this continued awareness effort, the agencies will develop articles for print media, speaking opportunities for program representatives on radio and television and before community groups, public service announcements for radio and television, and brochures on 3-5 specific ridesharing options (including ridesharing lanes and bypass lanes).

Recommended New RTP Action # , p

As part of the Come Together effort, SCAG the CTCs and Caltrans will develop a public awareness and involvement program in Los Angeles County, in the Harbor, Santa Ana and Century freeway corridors to increase people's understanding of bypass lanes at metered ramps and express lanes and to demonstrate how these options could work in those corridors. Such an awareness program should be undertaken in other corridors as appropriate.

Recommended New RTP Action # , p

SCAG, in cooperation with appropriate agencies, will develop, on a demonstration basis, several home-end or community based programs which test various techniques designed to provide a more personalized or targeted approach to ridesharing.

Recommended New RTP Action # , p

SCAG and the CTCs will study ways of promoting and developing ridesharing activities for non-commute trip purposes at selected activity centers. A public awareness and involvement effort will be conducted at at least one site during FY 80 to test the effectiveness of encouraging ridesharing for non-regular trips.

Recommended New RTP Action # , p

SCAG and Caltrans, in conjunction with the subregional agencies, will develop an information sharing and technical assistance program to help local governments develop locally implementable projects which encourage the use of high occupancy vehicles such as reserved curbside lanes for buses and carpools, on-and off-street parking programs.

Ridesharing Action Changes

Existing RTP Action #1 p. 6-6

Endorse preferential treatment for high-occupancy vehicles, including exclusive lanes on freeways and arterials where consistent with adopted criteria, bypass lanes for on-ramps, and preferential parking.

Recommended Change RTP Action #1 p. 6-6

SCAG supports Caltrans' implementation of rideshare lanes on the Santa Ana, Harbor and Century Freeways as well as related ridesharing activities on these freeways including bypass lanes at metered on-ramps and park/ride and park/pool lots.

Existing RTP Action #2 p 6-6

Continue to support current rideshare program.

Recommended change RTP Action #2 p 6-6

(drop)

Existing RTP Action #3 p. 6-6

Continue to support Commuter Computer to provide high occupancy vehicle incentives such as carpool and vanpool matching, and bus information in the region.

Recommended Change RTP Action #3 p. 6-6

SCAG, Caltrans and the subregional agencies will continue to support Commuter Computer's ability to provide carpool, vanpool and taxipool matching and will support funding for expansion of existing computer capacity to handle service information and rideshare matching.

Existing RTP Action #4 p 6-6

Install bypass lanes for high occupancy vehicles at 50% of the metered freeway ramps in the urbanized area, using the following schedule:

RAMP METERING PROJECT IMPLEMENTATION SCHEDULE

	RAMPS METERED	BYPASS LANES	RAMPS WITH BYPASS LANES
As of Jan. 1978	253	46	18%
By Jan. 1979	567	223	39%
By Jan. 1980	700	350	50%
By Jan. 1983	1000	500	50%

Recommended Change RTP Action # 4 p 6-6

Caltrans will install bypass lanes at metered freeway ramps, where such lanes are technically feasible and appropriate, according to the following schedule:

RAMP METERING PROJECT IMPLEMENTATION SCHEDULE

	RAMPS METERED	BYPASS LANES	RAMPS WITH BYPASS LANES
As of Jan. 1978	253	46	18%
By Jan. 1979	373	93	25%
By Jan. 1980	602	211	35%
By Jan. 1983	1000	400	40%

Existing RTP Action #6 p 6-6

Construct the I-105 freeway as a joint transit way; include ramp metering and by-pass lanes for high occupancy vehicles.

Recommended Change RTP Action #6 p 6-6

Keep, but add: Planning and design will include facilities for preferential access to LAX for high-occupancy vehicles.

Existing RTP Action #7 p 6-6

Expand existing information campaign and other measures to encourage employer-sponsored VMT reduction programs, such as carpooling, vanpooling, subscription bus service, public transit use and flextime to facilitate schedule flexibility for ridesharers. Urge employers to provide free bus passes and carpool vanpool subsidies equivalent to their current parking subsidies for the single-occupant vehicle.

Recommended Change RTP Action #7 p 6-6

SCAG, the CTCs and Caltrans will work to expand existing employer sponsored ridesharing programs to meet the objectives set forth in Section 4.3.4. To accomplish this objective, the agencies will assist public and private employers in providing bus passes for employees, sponsoring carpools or vanpools, providing subscription bus service, assigning preferential parking spaces for ridesharing vehicles, instituting flextime and using fleet vehicles for ridesharing purposes.

Existing RTP Action #8, p. 6-7

Continue to monitor and propose changes to local ordinances, state and federal laws and regulations relating to their implications for carpooling and vanpooling programs and the operation of public transit and private transit service (e.g., taxis and commuter buses).

Recommended Change RTP Action #8, p. 6-7

SCAG, the CTC's and Caltrans will continue to examine existing and new local ordinances, and state and federal laws and regulations relating to their implications for ridesharing, and propose changes which will encourage the use of carpools, vanpools, taxipools, buses, and trains.

6.3.5 REGIONAL TRANSIT DEVELOPMENT PROGRAM

The following text and actions related to the Regional Transit Development Program replace portions of the existing text and actions in the 1978 Regional Transportation Plan, from pages 6-14 through 6-21.

Background

The 1977 Regional Transportation Plan endorsed preliminary engineering and environmental analysis relating to a Regional Transit Development Program (RTDP) that would consist of the following elements:

Element I - Transportation Systems Management (TSM)

This addresses improvements to the current bus system. Strategies include bus priority programs, modernization of capital facilities and the expansion of transit service levels.

Element II - Freeway Transit

This involves the development of a bus-on-freeway rapid transit system which utilizes the existing freeway network with sections of exclusive lanes similar to the El Monte Busway.

Element III - Los Angeles Downtown People Mover

This is a proposed distribution/circulation system located in the central business district of Los Angeles.

Element IV - Regional Core Rapid Transit

This involves a rapid transit facility to serve the regional core area encompassing downtown Los Angeles, The Wilshire Corridor, Hollywood and North Hollywood.

In December of 1976, the U.S. Secretary of Transportation approved the funding of preliminary engineering and environmental analysis for the RTDP. The federal share of the downtown people mover construction costs was also approved pending local funding support and environmental clearances.

Technical Analysis of RTDP Elements

A substantial amount of analysis and evaluation has been undertaken for each of the RTDP elements. These are described as follows:

TSM

SCRTD developed a document entitled Transit TSM Element of the RTDP: First Annual Report, which discusses short-term improvements to the current bus system. These include transit priority strategies, modernization of capital facilities, the development of community transit, and the possible expansion of transit service levels.

Freeway Transit

The Freeway Transit Plan Refinement Study evaluated several alternatives for providing bus-on-freeway rapid transit. The report recommends constructing rideshare lanes on the Harbor Freeway and/or the Santa Ana

Freeway and the Century (I-105) Freeway as the initial phase in implementing a complete system.

Downtown People Mover

The City of Los Angeles Community Redevelopment Agency has completed a Draft Environmental Impact Report on a proposed 2.7-mile-long automated guideway system to operate between the Convention Center and Union Station.

Regional Core Rapid Transit

SCRTD has completed its Draft Report on the Regional Core Transit Alternatives Analysis. The SCRTD Board of Directors has recommended implementation of Alternative 2, a rail line subway 18 miles in length from downtown Los Angeles out Wilshire Boulevard to Fairfax Avenue, and north to North Hollywood in the San Fernando Valley.

The RTDP Integration Report

SCAG, working through the Interagency Technical Committee and the Interagency Coordinating Committee and in close cooperation with staffs of the County Transportation Commissions and the implementing agencies, has prepared an RTDP Integration Report. This report integrates the work done on each of the elements and makes recommendations as to what should be implemented. Two basic recommended plans emerge from the evaluation and analysis of the RTDP elements. These are:

I. The RTDP

This is recommended for plan adoption although increased funding must be sought to accomplish it. Chapter 7 discusses possible methods of obtaining this increased funding. The program consists of:

- o Implementation of various TSM programs and projects which would include a moderate expansion of transit service levels.
- o Development of rideshare lanes (designed for possible conversion to rail) on the following freeways - Santa Ana (downtown Los Angeles to Route 91), Harbor (I-10 to I-105 with stations located south of I-105 to San Pedro), Hollywood (downtown Los Angeles to North Hollywood), Ventura (Hollywood Freeway to Reseda Boulevard), Santa Monica (downtown Los Angeles to La Cienega), Century (I-105) from LAX to I-605, San Diego (US 101 to the Marina Freeway), extension of El Monte Busway from its current western terminus to Union Station, extension of Long Beach (I-10 to I-210).
- o Construction of the Los Angeles downtown people mover that would include inter-modal transfer facilities at the Convention Center and Union Station.

- o Construction of an 18-mile rail rapid transit line from downtown Los Angeles along Wilshire to Fairfax Avenue, north on Fairfax to Hollywood and through The Cahuenga Pass to North Hollywood.

II. The Financially Feasible Implementation Program

This is the first phase of the RTDP. The elements included in this program can be implemented without additional funding beyond anticipated levels. The program consists of the following:

- o Implementation of various TSM programs that would not involve expansion of service beyond current levels.
- o Development of rideshare lanes (designed for possible conversion to rail) on the Santa Ana Freeway (downtown Los Angeles to I-605), the Harbor Freeway (I-10 to I-105 with stations south of I-105 to San Pedro), the Century Freeway (LAX to I-605), and the extension of the El Monte Busway from its current western terminus to Union Station.
- o Construction of the Los Angeles downtown people mover that would include intermodal transfer facilities at the Convention Center and Union Station.
- o Construction of an 18-mile rail rapid transit line from downtown Los Angeles along Wilshire Boulevard to Fairfax Avenue, north on Fairfax to Hollywood, and through the Cahuenga Pass to North Hollywood.

Future RTDP-related Planning

The RTDP, as currently developed, addresses transit improvements in Los Angeles County. It is recommended that the region's transportation planning work program include the necessary analysis and study that would evaluate the development of the RTDP in Orange, Riverside, San Bernardino, and Ventura Counties.

6.3.3 PROGRAM OBJECTIVES AND RELATIONSHIP TO OTHER PLANNING PROGRAMS

(This text and table replace the existing text on page 6-14 and Table 6.3-2, page 6-14.)

Table 6.3-2 identifies 1976 and 1990 total daily person trips and transit trips for the SCAG region. The projected trips for 1990 are based upon LARTS modelling and patronage forecasting methodology. It should be noted that the projected trip-making in the region is an extrapolation of current trip-making based upon various factors. The projected trips do not necessarily reflect actual policy relating to travel volumes and the modal breakdown of these volumes. The Overall Work Program for the SCAG region is expected to examine and further refine these projections.

The projected 1990 transit trips identified in Table 6.3-2 assumes implementation of the complete RTDP in Los Angeles County. However, the anticipated 4.3% transit share of the projected total trips is less than the 6% transit share which has been identified as a goal for the SCAG region. In order to reach this 6% objective, other strategies which encourage transit must be successfully implemented. These include fare policy changes, parking management, employee subsidies, and upgraded information and marketing programs. It could also include development of the RTDP in Orange, Riverside, San Bernardino, and Ventura Counties, as recommended by future planning and analysis.

Table 6.3-2
Transit Ridership in SCAG Region

County	Current			Predicted 1990			Regional Objective 1990	
	Person ^a Trips	Transit ^b Trips	% Transit	Person ^c Trips	Transit ^d Trips	% Transit	Transit ^e Trips	% Transit
Imperial	257,400	0	0	N/A	0	0	0	0
Los Angeles	24,098,365	976,355	4.05	26,031,694	1,493,000	5.74	2,075,000	8.00
Orange	6,306,608	173,963	2.08	8,933,752	254,031	2.84	353,000	3.95
Riverside	1,233,098	7,366	0.59	1,966,367	19,015	1.00	26,400	1.34
San Bernardino	1,831,809	7,939	0.43	2,811,401	35,971	1.28	50,000	1.78
Ventura	1,469,384	8,332	0.56	2,218,434	9,529	0.43	13,245	0.60
TOTAL SCAG	35,196,660	1,173,951	3.33	41,961,654	1,811,546	4.30	2,517,645	6.00

Notes

^aTrip productions from CC977A8 - with 1976 trip rates

^bTrip productions from CC977A8 - with 1976 trip rates (existing transit network)

^cTrip productions with 1976 trip rates

^dTrip productions from RTDP 43d - with high-level freeway transit and CBD-NH rail alignment

^eComputed by: first, computing 6% regional objective $2,517,699 = 41,961,654 \times 0.06$;
then, computing the necessary regional increase $2,517,645 \div 1,811,546 = 1.4$;
and finally, multiplying this increase factor by the predicted transit trips
in column d.

6.3.5

System Development Actions

This narrative and actions section replaces existing text and actions on pages 6-19 through 6-20.

Regional Transit Development Program: Plan Development

A substantial amount of planning relating to the financially feasible RTDP in Los Angeles County, as described under Action No.'s 21-24, has been completed. However, the full RTDP including the moderate expansion of service levels and the implementation of the complete Freeway Transit Program is recommended pending increased funding support beyond anticipated levels. It is anticipated that further planning relating to possible RDTP development will be undertaken by Orange, Riverside, San Bernardino, and Ventura Counties.

Regional Transit Development Program: Facility Improvements

Based on several key studies that have been completed, a more specific program has been developed for implementation of the RTDP in Los Angeles County. The program and the analysis leading to its development are described in detail in the RTDP Integration Report developed by SCAG.

The currently developed RTDP, as depicted in Figure 6A, is recommended for implementation contingent upon an increase in funding beyond anticipated levels. Chapter 7 discusses possible methods of obtaining increased funding. The recommended complete program is as follows:

TSM

- o Implementation of transit priority programs on arterials
- o Development of facilities to improve intermodal transfers
- o Enhancement of community transit when appropriate
- o Modernization of transit capital facilities/vehicles
- o Expansion of bus fleet by approximately 900 vehicles (750 for SCRTD)

Freeway Transit

Development of rideshare lanes (designed for possible conversion to rail) on the following freeways: The Harbor (I-10 to I-105 with stations south of I-105 to San Pedro), the Santa Ana (downtown Los Angeles to Rt. 91), Ventura (Hollywood Freeway to Reseda), Century (LAX to I-605), the extension of the Long Beach (I-10 to I-210), the Hollywood (downtown Los Angeles to the Ventura Freeway), extension of El Monte Busway from its current western terminus to Union Station, Santa Monica (downtown Los Angeles to La Cienega), San Diego (U.S. 101 to Marina).

Development of service improvements on several regional freeways. Included among these are I-10 (Santa Monica to Pomona), San Diego (Valencia to Long Beach), U.S. 101 (Thousand Oaks to downtown Los Angeles), Harbor (San Pedro to downtown Los Angeles), and Long Beach (Pasadena to Long Beach).

Downtown People Mover (DPM)

Construction of the Los Angeles Downtown People Mover which would include intermodal transfer facilities at the Convention Center and Union Station.

Rail Rapid Transit

Construction of an 18-mile rail rapid transit line from downtown Los Angeles along Wilshire Boulevard to Fairfax Avenue, to Hollywood and through the Cahuenga Pass to North Hollywood.

As noted above, implementation of the complete RTDP is contingent upon increased funding support. At the present time, only a portion of the Program is financially feasible. This portion of the Program, the financially feasible implementation program (depicted in Figure 6B), is described in Actions #21-#24.

Existing RTP Action #17 p. 6-19

LACTC, Transit Operators, CALTRANS, and the City and County of Los Angeles will conduct preliminary engineering and EIS phase I and then implement the Regional Transit Development Program in Los Angeles County as approved and funded by local jurisdictions.

Recommended Change RTP Action #17 p. 6-19

LACTC, transit operators, Caltrans, and the City and County of Los Angeles will conduct further analysis and evaluation of those portions of the full RTDP which cannot be implemented without increased funding support. More detailed analysis and evaluation relating to the financially feasible RTDP is described in Actions #21-#24.

Recommended New RTP Action # , p.

County Transportation Commissions, Caltrans, SCAG, and other appropriate agencies will conduct the necessary analysis and studies that will evaluate development of the RTDP in Riverside, San Bernardino, and Ventura Counties. The Orange County Transportation Commission, OCTD, Caltrans, and other appropriate agencies will continue the alternatives analysis relating to possible RTDP development in Orange County.

Recommended New RTP Action # , p.

SCAG, SCRTD, and the Los Angeles County Transportation Commission will continue to evaluate the potential for rail rapid transit in additional corridors. Corridors for evaluation will be selected on the basis of projected patronage levels, potential for funding, and environmental acceptability.

Existing RTP Action #21, p. 6-20

Element I - Transportation System Management (TSM)

Appropriate transit operators will:

- a) maintain and rehabilitate the existing fleet and fixed facilities (null system);
- b) as additional funds become available for expanded operations: expand the local service fleet by several hundred additional buses by 1983 (650 additional buses for SCRTD, and additional buses for other transit operators in accordance with Short Range Transit Plan expansion options).
- c) implement priority service improvements on arterials (see TSM actions);
- d) expand community level services as demand warrants.

Recommended Change RTP Action #21, p. 6-20

Element I - Transportation System Management (TSM)

Transit operators will

- a) maintain existing levels of service;
- b) develop convenient transfer facilities to encourage greater transit utilization;
- c) modernize transit facilities and equipment including revenue vehicles;
- d) implement, in conjunction with appropriate City and County of Los Angeles agencies, transit priority programs on arterials;
- e) develop community transit services when appropriate.

Existing RTP Action #22, p. 6-20

Element II - Freeway Transit

Caltrans, local agencies, and appropriate transit operators will:

- a) conduct preliminary engineering and EIR/EIS work on several first-stage sub-elements, including the busway on the Harbor Freeway and the busway on the Santa Ana Freeway, as additional funds become available;
- b) place in exoress service approximately 1000 high-capacity buses to provide a high level, bus rapid transit system over the regional freeway network;
- c) to achieve the desired high level transit service (35 to 55 mph speeds), either meter mixed flow freeway traffic to freeflow condition or, where extreme congestion warrants, construct 64 miles of exclusive busway facilities.

Recommended Change RTP Action #22, p. 6-20

Element II - Freeway Transit

Caltrans will develop rideshare lanes on the following freeways:

- a) Harbor Freeway (from I-10 to I-105 with stations south of I-105 to San Pedro);
 - b) Santa Ana Freeway (from downtown Los Angeles to I-605);
 - c) Century Freeway (from LAX to I-605);
 - d) Extension of El Monte Busway from its current western terminus to Union Station.
-

Existing RTP Action #23, p. 6-21

Element III - Los Angeles Downtown People Mover

The City of Los Angeles will design and construct a 2.7-mile automated guideway people mover extending through downtown City of Los Angeles from Union Station in the North to the LA Convention Center in the South, interfacing with intercity rail, rail rapid transit (RTDP Element IV) and the freeway transit system (Element II.)

Recommended Change RTP Action #23

Element III - Los Angeles Downtown People Mover

The City of Los Angeles will design and construct a downtown people mover that would include intermodal transfer facilities at Union Station and the Convention Center.

Existing RTP Action #24, p. 6-21

Element IV - Regional Core Rapid Transit

SCRTD will design and construct a grade-separated rapid transit facility serving the high activity Wilshire-North Hollywood corridor, to be integrated with the Freeway Transit and downtown people mover elements of the RTDP.

Recommended Change RTP Action #24, p. 6-21

Element IV - Regional Core Rapid Transit

SCRTD will design and construct a rail rapid transit line from downtown Los Angeles along Wilshire Boulevard to Fairfax Avenue, north on Fairfax to Hollywood, and through the Cahuenga Pass to North Hollywood. This will be integrated with the Freeway Transit and downtown people mover elements of the RTDP.

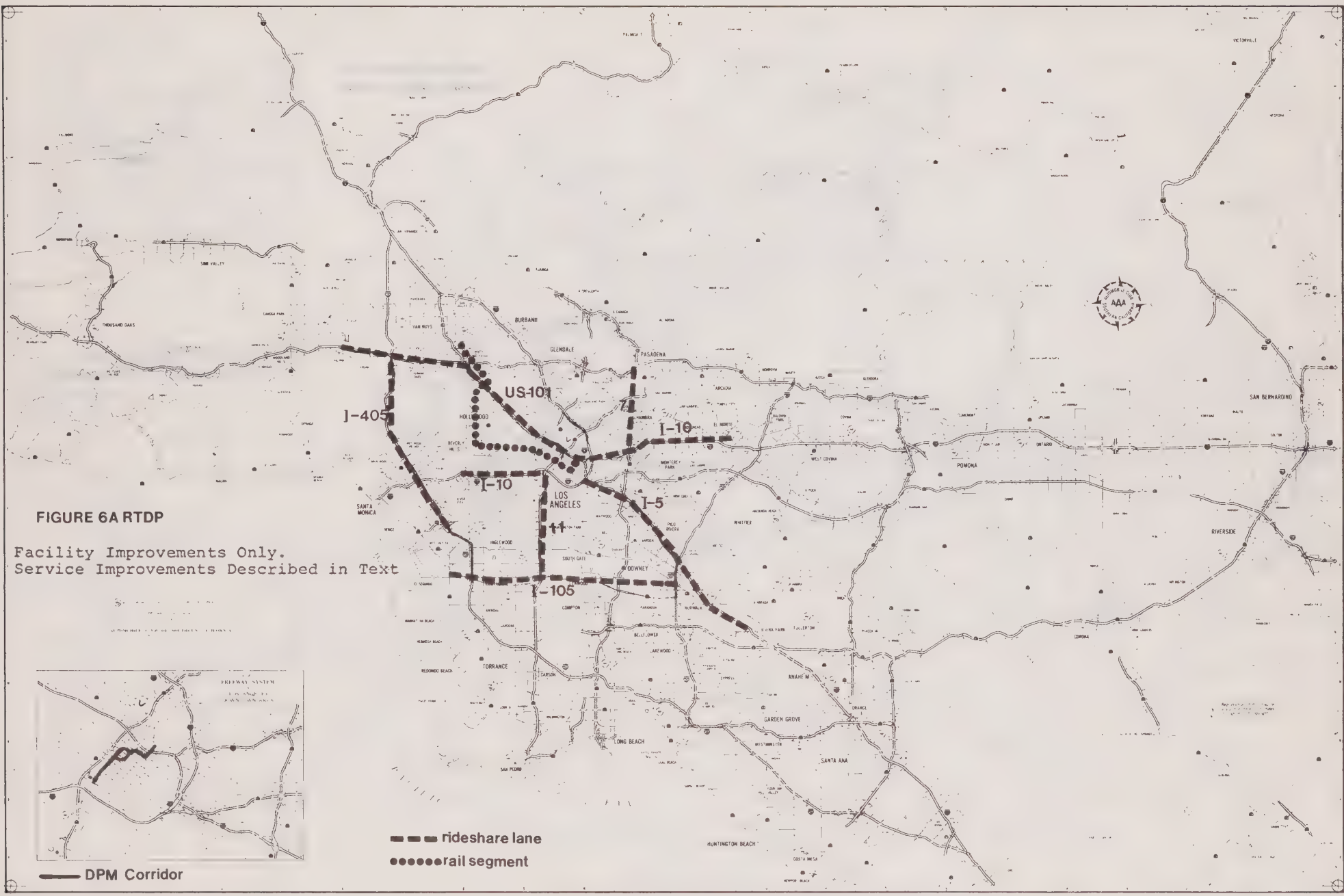
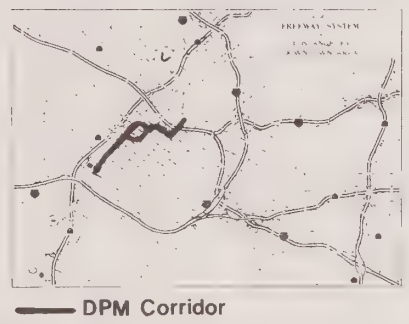


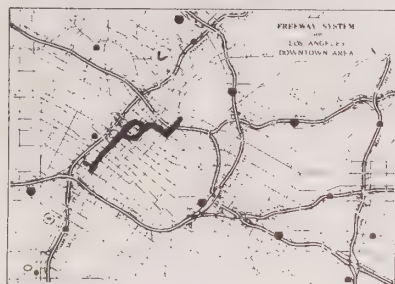
FIGURE 6A RTDP

Facility Improvements Only.
Service Improvements Described in Text



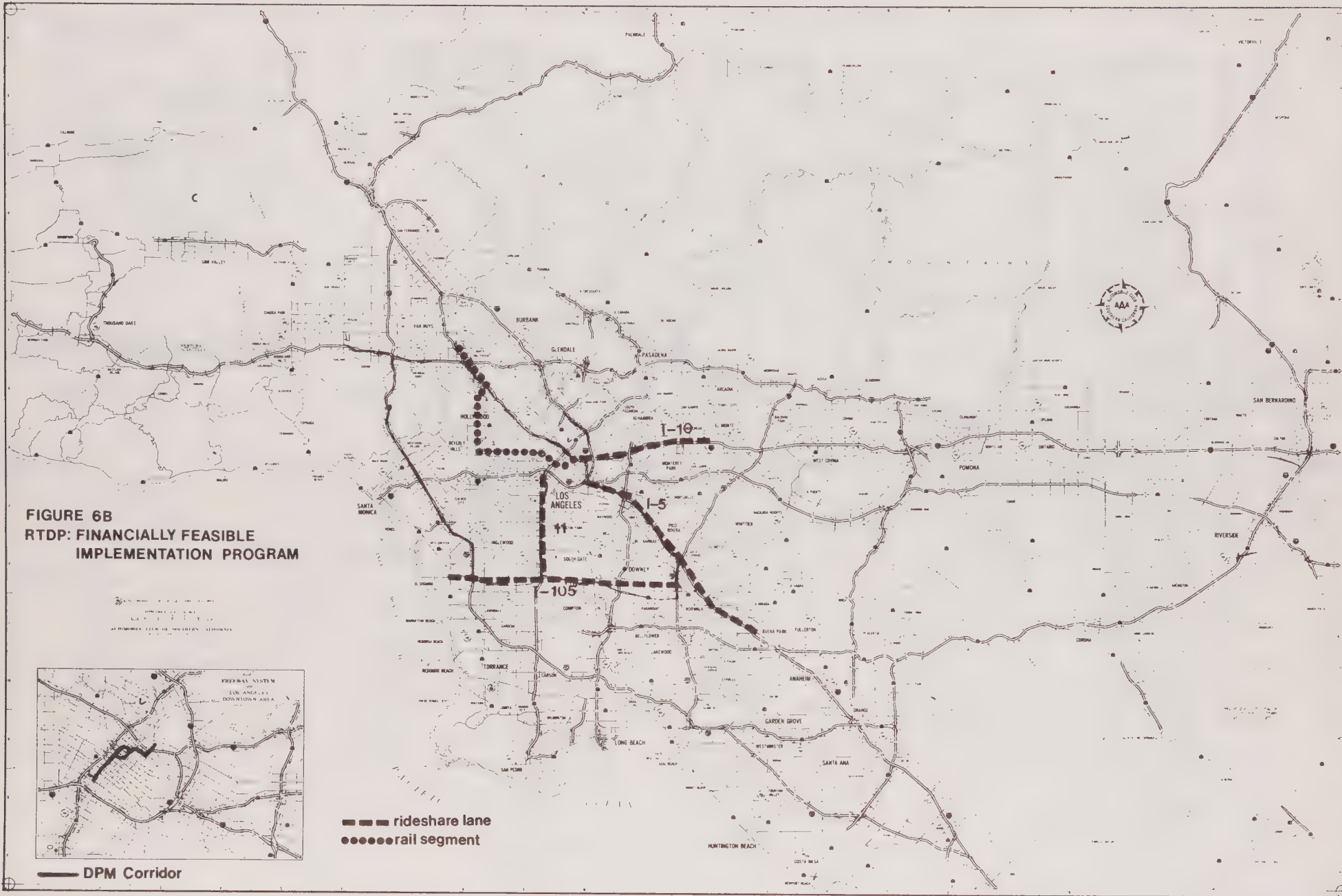
- rideshare lane
- rail segment

FIGURE 6B
RTDP: FINANCIALLY FEASIBLE
IMPLEMENTATION PROGRAM



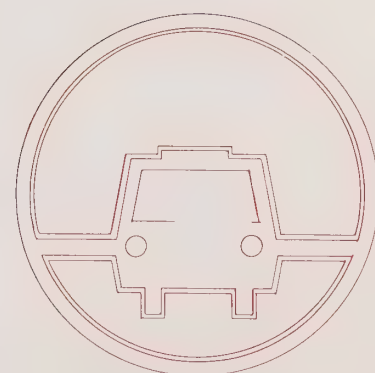
— — — rideshare lane
●●●●● rail segment

— DPM Corridor



finance text
and actions

7.0



7.0 FINANCE

The text and actions in this section replace existing text and actions on pages 7-1 through 7-6 of the adopted 1978 Regional Transportation Plan. The financial data presented is somewhat different from that in the South Coast Air Quality Management Plan, October 19, 1978. The information contained herein will be used to change the AQMP financial sections where appropriate.

I. Introduction

This element presents the financial data associated with the Regional Transportation Plan. It projects future revenues for transportation; it also indicates costs of transportation proposals including new recommendations for transportation control measures, construction of the Regional Transit Development Program, and Ridesharing.

Projected revenues will fund a substantial portion of the plan; system facility improvements in both transit and highways will be possible without tax increases. However, a comparison of costs and projected revenues over a 10 year time period shows that there is an unfunded deficit if the plan is to be fully implemented in that time period. A series of recommendations are made in order to fund all portions of the plan.

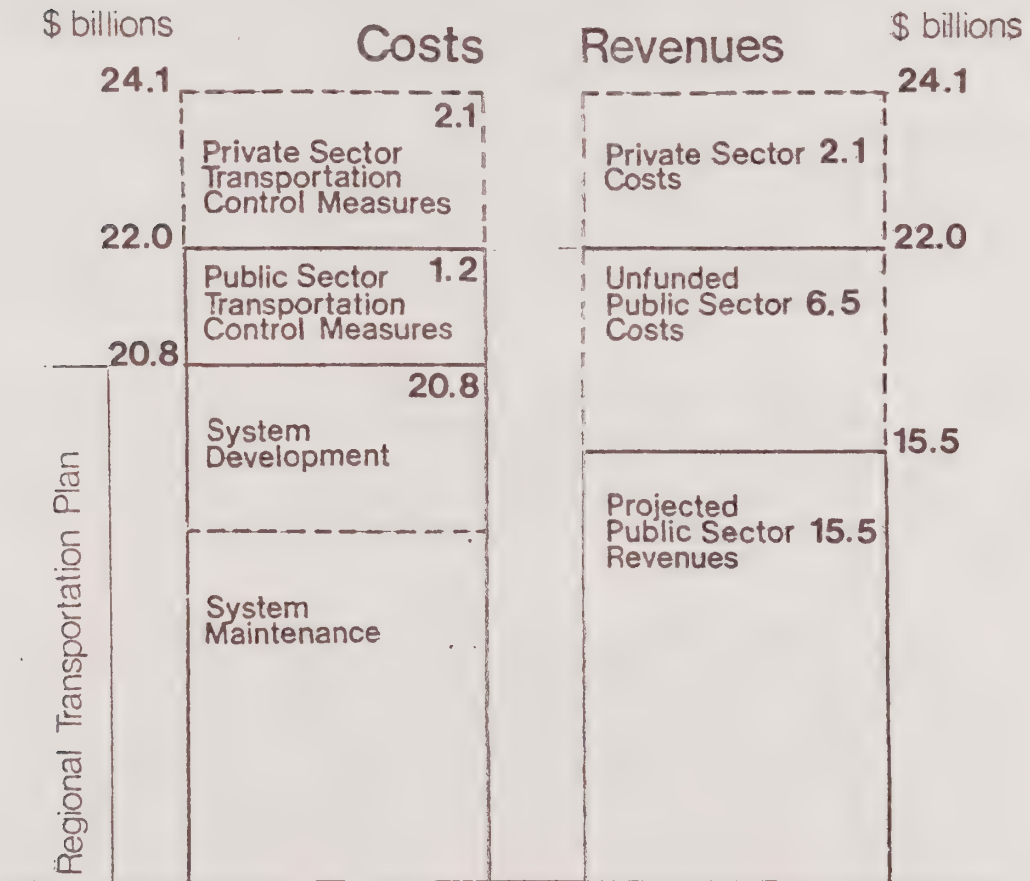
The detailed financial information is presented for two time periods: FY 79-83 and FY 84-88. The information is also given by major mode/facility (highways, transit, streets and roads and airports.) A breakdown of the funded dollar amounts are shown by mode or facility categories. Special attention is given to the transportation control measures being recommended in this amendment.

Figure 7-1 illustrates costs and revenues for the Regional Transportation Plan; public sector costs and revenues for system maintenance, system development, and air quality mobile source control are joined with private sector mobile source control measure costs. Projected public sector revenues of \$15.5 billion dollars from existing sources will fund neither all of the system maintenance and development costs of \$20.8 billion nor \$1.2 billion in costs projected for public sector transportation control measures. In all, the public sector faces unfunded costs of \$5.5 billion for system development and maintenance, and \$1.0 billion for mobile source control measures. An additional \$2.1 billion in mobile source measure cost is assumed to be borne by the private sector.

This deficit may be somewhat overstated for two reasons. First, it is assumed that the planned improvements are to be completed within the ten year period. As implementation is delayed, costs will rise but additional revenues will also become available. Second, the region is entitled to a large sum of UMTA Section 3 funds for transit development projects. However, since these revenues are discretionary it is somewhat misleading to include them as available revenues. Therefore Section 3 funds are excluded from available revenues, but are treated in more detail as a funding source later in this chapter. There are alternative methods to fund the public sector deficit. New sources of revenues are briefly discussed and the required amounts shown. A second approach is to achieve a greater return of the region's highway user tax dollar and the federal tax dollar being used for transit.

FIGURE 7-1

**COSTS AND REVENUES FOR REGIONAL TRANSPORTATION
MAINTENANCE, DEVELOPMENT AND AIR QUALITY CONTROL MEASURES
fy 1979-1988**



It is recommended that: (1) the percentage of regionally collected highway user revenues returned to the region be increased from 55% to 60%-65%. This would return approximately one half billion additional dollars to the region by 1988; (2) 20%-30% of the national allocation of UMTA Section 3 funds (for transit capital) be allocated to the region during the ten-year period.

The second major recommendation is to index the state gasoline tax in the SCAG region so that revenues keep pace with rising costs.

A third alternative was also considered. This was to have reprogramming of funds from one plan proposal to another. This may be necessary to fund high priority items such as air quality projects. However, it does not provide a greater total amount of revenue which is what is needed if the Regional Transportation Plan is to be fully implemented.

There are additional policies that relate to greater financial flexibility in the use of transportation funds by local government. These are already a part of the Regional Transportation Plan.

The remainder of the financial element is broken into the following sections. Section II details the costs and revenues for transportation system maintenance and development. Section III deals with financial data for transportation control measures. Section IV elaborates on the funding strategies mentioned above. Section V presents the recommended financial actions.

II. System Maintenance and Development Costs and Revenues

Table 7-1 outlines total revenues projected to be available in the region for transportation purposes during the ten-year period. \$5.8 billion is available for transit expenditure, \$3.3 billion for highway expenditure, \$4.9 billion for street and road expenditure, and \$695 million for airport expenditures. An additional \$600 million in State Proposition 5 gas tax and TDA funds has not been allotted to any mode. (A list of major assumptions used to develop these figures, as well as those in Table 7-2, can be found in Appendix I.) Several funding sources may, by law, be expended in more than one modal area. This results in some funding sources which are split into more than one mode (i.e., Federal Aid Urban). The distribution of revenues in Table 7-1 assumes that historical modal distribution of most revenues will be continued into the future.

Among funds allocated to transit, UMTA Section 5 revenues are projected to increase by over 30% as a result of newly enacted transit legislation (H11738). A similar increase is projected after FY 1983. UMTA Section 3 funds are shown to decline during the second five year period. However, Section 3 funds which may be available pending approval of portions of the Regional Transportation Plan are excluded from the totals in Table 7-1. Since this is a discretionary program, it would be misleading to include grants which may or may not occur in the future. A more thorough treatment of UMTA Section 3 funds may be found in Section III.

Table 7-1
Existing Transportation
Revenues Projected Through Fiscal Year 1988
(Escalated \$ Millions)

(1)		FT 1979	FY 1979- 1983	FY 1984- 1988	FY 1979- 1988	Alternative Modal Uses
(1)	<u>TRANSIT</u>					
(2)	UMTA Section 3	\$ 52	\$ 406	\$ 251	\$ 657	
(3)	UMTA Section 5	97	450	607	1057	
(4)	Federal Aid Urban	1	15	15	30	Highways, Streets & Roads
(5)	TDA (1/4¢ Sales Tax)	111	629	896	1525	Streets and Roads
(6)	FARES	102	563	1126	1689	
(7)	Miscellaneous	43	243	333	576	
(8)	Article 19-Gas Tax	-	21	17	38	
(9)	Federal Aid Interstate	-	246	178	424	
	TOTAL	\$ 406	\$ 2573	\$ 3423	\$ 5996	
	<u>HIGHWAYS</u>					
(10)	Federal Aid Interstate *	83	367	540	907	Transit Guideway
(11)	Federal Aid Primary *	40	126	133	259	
(12)	Federal Aid Urban*	10	45	45	90	Transit, Streets & Roads
(13)	Federal Aid, Other*	4	29	31	60	
(14)	Article 19-Gas Tax to State Highways	75	978	931	1909	Transit Guideway
	TOTAL	\$ 212	\$ 1545	\$ 1680	\$ 3225	
	<u>STREETS AND ROADS</u>					
(15)	Federal Aid Urban	38	190	190	380	Transit, Highways
(16)	Federal Aid Other	17	110	170	280	
(17)	Article 19-Gas Tax to Cities and Counties	180	900	900	1800	Transit Guideway
(18)	TDA (1/4¢ Sales Tax)	10	90	140	230	Transit
(19)	Local	224	1125	1125	2250	
	TOTAL	\$ 469	\$ 2415	\$ 2525	\$ 4940	
	<u>AIRPORTS</u>					
(20)	Airport Development Aid Program	19	190	NA	190+	
(21)	California Airport Aid Program	2	5	NA	5+	
	Local	9	500	NA	500+	
	TOTAL	\$ 30	\$ 695	\$ NA	\$ 695+	
(22)	TDA Available for Further Development	\$ -	\$ 156	\$ 320	\$ 476	Transit Streets & Roads
(23)	State Proposition 5-Gas Tax	-	65	80	145	Transit Guideway, High- ways
	GRAND TOTAL	\$ 1117	\$ 7449	\$ 8028	\$ 15,477	

* For capital expenditure only.

The treatment of TDA funds requires some detailed explanation. TDA funds can be used for a variety of transportation activities. Forecasts of total TDA revenues were provided by the UCLA Business Forecasting Project. Based on a number of assumptions (see Appendix J), the TDA amount needed to maintain existing levels of transit service is projected at \$1.5 billion. This is shown in row 5.

Based on historical data, 10% of TDA funds were projected for street and road use. The remainder of TDA funds (row 22) are shown as available for system development. In other words these funds could be used for either street and road development, or transit capital and operational needs. A weakness of this projection is that the analysis of TDA fund availability was done on a region-wide, rather than county by county, basis. It is difficult to predict how much of these remaining funds will be used for transit, and what portion would be committed to streets and roads.

Because of this ambiguity, further county by county analysis will be undertaken in the future which will help to clarify what portion of TDA funds will likely be eligible for each modal use. Of course, any future decision on the distribution of TDA funds will be contingent upon unmet needs hearings and actions by the county transportation commissions, IVAG, VCAG, and SCAG.

Fares and miscellaneous revenues are expected to grow as a function of increased operating expenditures.

Highway revenue projections, based on fund estimates from CALTRANS, show a slight increase in federal funds coupled with a small decline in state gas tax funds. As can be seen in Table 7-1, Federal Aid Interstate funds are allocated both to transit and highways. Analysis done for this chapter suggests that currently planned Interstate highway gaps, missing links, and widenings (I-105 and I-15) will require approximately \$900 million of FAI funds during the ten year period. Remaining Interstate funds of \$424 million will be available for freeway transit guideway. \$38 million in state gas tax revenue will be needed to match these FAI funds.

Federal aid to streets and roads is expected to grow slightly, but the two major sources of street and road revenue, the gas tax and local support, are expected to remain relatively constant. Airport funding is based on plans submitted to SCAG by regional airports operators.

Finally, in the last row of Table 7-1 is an entry for State Proposition 5 - Gas Tax, based on an estimate provided by CALTRANS. These Proposition 5 funds are listed separately because, to date, they have not been expended for construction. Because use of this revenue for transit requires a policy decision, it is considered separately.

Table 7-2 divides escalated costs for transportation system maintenance and development into funded and unfunded portions. Projected expenditures, escalated at 8% annually, are assumed to be completed no later than fiscal year 1988.¹ Obviously, if some expenditures are delayed until after 1988, lower unfunded amounts during the ten year period will result. However, delaying strategies have historically, during times of high

Table 7-2

Funded and Unfunded Costs
Transportation System Maintenance and Development
(escalated \$ Millions)

	FUNDED			UNFUNDED			TOTAL COSTS		
	Fiscal Years			Fiscal Years			Fiscal Years		
	1979-1983	1984-1988	1979-1988	1979-1983	1984-1988	1979-1988	1979-1983	1984-1988	1979-1988
TRANSIT									
(1) Operations, Short-Range Transit Plans	\$1742	\$2560	\$4302	\$ 0	\$ 0	\$ 0	\$1742	\$2560	\$4302
(2) Capital, Short-Range Transit Plans	437	358	795	0	0	0	437	358	795
3) Wilshire Rail Line - RTDP Element IV	0	96	96	1178	579	1757	1178	675	1853
4) L.A. Downtown People Mover- RTDP Element III	148	37	185	38	0	38	186	37	223
5) Freeway Transit - RTDP Element II	246	222	468	321	1686	2007	567	1908	2475
TOTAL TRANSIT	\$2573	\$3273	\$5846	\$1537	\$2265	\$3802	\$4110	\$5538	\$9648
6) HIGHWAYS									
7) Non-Capital Capital	\$ 784	\$ 721	\$1505	\$ 0	\$ 283	\$ 283	\$ 784	\$1004	\$1788
8) • Operational Improvements									
9) - Metered Freeway Ramps*	10	14	24	0	0	0	10	14	24
10) - Other	73	53	126	0	0	0	73	53	126
11) • Rehabilitation	210	210	420	0	0	0	210	210	420
• New Facilities	455	652	1107	299	75	374	754	727	1481
12) - Missing links, gaps, widenings*							715	652	1367
13) - Congestion relief widenings*							39	75	114
TOTAL HIGHWAYS	\$1532	\$1650	\$3182	\$ 299	\$ 358	\$ 659	\$1831	\$2008	\$3839
RIDESHARE									
14) Metered Ramp Bypasses*	\$ 5	\$ 18	\$ 23	\$ 0	\$ 0	\$ 0	\$ 5	\$ 18	\$ 23
TOTAL RIDESHARE	\$ 5	\$ 18	\$ 23	\$ 0	\$ 0	\$ 0	\$ 5	\$ 18	\$ 23
STREETS AND ROADS									
15) Maintenance & Administration	\$1680	\$2165	\$3845	\$ 0	\$ 301	\$ 301	\$1680	\$2466	\$4146
16) Capital	723	348	1071	247	1082	1329	970	1430	2400
TOTAL STREETS & ROADS	\$2403	\$2513	\$4916	\$ 247	\$ 1383	\$1630	\$2650	\$3896	\$6546
17) AIRPORTS									
Capital	\$ 695	NA	\$ 695+	\$ 0	NA	\$ 0+	\$ 695	NA	\$ 695+
TDA AVAILABLE FOR FURTHER DEVELOPMENT	139	293	432	(139)	(293)	(432)	-	-	-
PROPOSITION 5 - GAS TAX	65	80	145	(65)	(80)	(145)	-	-	-
GRAND TOTAL	\$7412	\$7627	\$15239	\$1879	\$3633	\$5512	\$9291	\$11460	\$20,751

*Capital Cost Only

inflation, resulted in less real purchasing power. This problem will be exacerbated in the future if revenue increases fail to keep pace with cost increases.

Following is a discussion of the financial implications, by mode, of the figures presented in Table 7-2.

TRANSIT

The Regional Transportation Plan calls for maintenance and operation of the current transit system, coupled with expansion of service via the Regional Transportation Development Program elements. As a result of Proposition 13, bus fleet expansion is likely to be curtailed. The RTDP, as mentioned in a previous chapter, is now being examined in terms of both a full program and a staged, currently implementable plan.

Transit expenditures for the FY 1979-1983 period are modified from Short-Range Transit Plans (SRTPs) submitted by regional operators prior to passage of Proposition 13. These SRTPs envisioned bus fleet expansion of 450 buses during the five year period, largely in Orange County. It has been assumed that, as a result of Proposition 13, no expansion will occur. Projected costs have been reduced accordingly. Bus expansion is nonetheless a goal of the RTP. Costs for this measure are included in Table 7-3 as an air quality measure.

The costs for elements II, III and IV of the complete Regional Transit Develop Program are also shown in Table 7-2. Revenues for these three elements fall short of costs by nearly \$4 billion. Under existing constraints capital funds also fall short for the recommended first phase implementation of the RTDP by approximately \$2 billion. However, this phase is fundable contingent upon:

1. UMTA approval of projects and receipt of UMTA Section 3 funds,
2. Use of all available Proposition 5 funds for RTDP projects

HIGHWAYS

Highway revenues are projected to remain virtually constant over the ten year period. This is primarily the result of increasingly strict vehicle mileage standards coupled with increased travel. It means that non-capital costs (primarily maintenance and administration), which are rapidly growing, will require a larger portion of the total revenues. Therefore, the portion of highway revenues available for new facilities will diminish. Until regional prioritization of highway projects is undertaken, it will not be possible to determine which projects are unfunded.

By the early to mid-1980s, non-capital costs will exceed state highway user revenues. Current federal law precludes the use of almost all federal funds for non-capital expenditures. This means that regardless of non-capital needs non-capital expenditures will be fixed, constrained by the amount of state gas tax funds. It is assumed in Table 7-2 that enough state funds will be retained to match federal capital funds. However, this creates a rather anomalous situation in which continued new facility construction occurs despite inadequate maintenance funding.

Although it is assumed for the purpose of analysis that capital expenditure will continue despite inadequate maintenance funding, it is not clear that this is the policy of the state. Conceivably all state funds will be used for maintenance. This is an unresolved issue with possible major ramifications for the region. Staff will continue to study this issue.

There are at least two possible solutions to this problem. The first is legislation enabling states to use all federal dollars for non-capital purposes. But, this solution merely delays the inevitable. By 1990 all projected highway revenues may be needed to cover non-capital expenditures.

A second solution is to generate new revenue. For example, a regionally indexed gasoline tax would provide approximately \$1.6 billion. This strategy is discussed in more detail in Section IV.

STREETS AND ROADS

Total maintenance, administration, and capital needs for streets and roads are projected to be underfunded by \$1.6 billion during the ten year period. Most of the problems occur during the second five year period, when unfunded maintenance and administration costs total \$300 million, and unfunded capital costs total \$1.1 billion.

Once again, it is assumed that sufficient funds will be retained to match federal capital dollars. This explains the \$300 million maintenance and administration deficit during the period fiscal year 1984-1988.

III. MOBILE SOURCE CONTROL MEASURES

Mobile source transportation control measures are being recommended in the Air Quality Management Plan for the South Coast Air Basin. They are being highlighted here because of their importance in making funding decisions. Table 7-3 shows escalated mobile source measure costs over two five-year periods, FY 1979 through FY 1983, and FY 1984 through FY 1988. It should be noted that costs for several measures -- freeway transit and carpool lanes (H-85), the Wilshire rail line (H-86), the Los Angeles Downtown People Mover (H-87), and Congestion Relief Freeway Widening (H-88) -- have already been accounted for in Table 7-2 as system development costs. The division of RTP costs into two tables makes them more understandable.

The escalated costs for most of the measures in Table 7-3 were developed by:

- (1) Dividing current capital costs by the number of years between the beginning of implementation (from Table 5.1-1) and fiscal year 1988, and
- (2) Adding that figure to annual operating and maintenance costs, and finally,
- (3) Escalating this figure yearly by 8%.

Total public sector costs were broken into funded and unfunded categories. The source of funding for the four partially funded measures -- Increased Bicycle and Pedestrian Facilities (H-23), Rideshare Program (H-34), Traffic Signal Synchronization (H-35), and Transit Improvements (H-89) -- is given in the first column.

Over the ten year period, public sector mobile source control measures costs are projected to total \$1.5 billion. However, costs for electrification of rail yards (H-11), reduction of jet aircraft queueing delays (H-25), voluntary retirement of old cars (H-36), and marine vapor recovery operations (H-62), are not traditionally viewed as public transportation costs. Therefore, after deducting costs for these measures, a total of \$1.2 billion is charged to the RTP for mobile source control measures. Approximately \$1.0 billion of this cost is unfunded. Partially because transit improvements are scheduled to begin at the onset of the second five-year period, over 75% of the unfunded public sector expenditures will be necessary after FY 1983. Approximately 75% of the \$2.1 billion private sector costs are called for after FY 1983.

TABLE 7-3

Funded and Unfunded Costs: Mobile Source Control Measures
(escalated \$ Millions)

Measure Number	FUNDING SOURCE	FUNDED			UNFUNDED			TOTAL COSTS				
		Fiscal Years			Fiscal Years			Fiscal Years				
		1979-1983	1984-1988	1979-1988	1979-1983	1984-1988	1979-1988	1979-1983	1984-1988	1979-1988		
		PUBLIC SECTOR DIRECT COSTS										
(1)	H-11	Electrify Rail Yards*	\$ 0	\$ 0	\$ 0	\$ 0	\$ 14	\$ 14	\$ 0	\$ 14	\$ 14	
(2)	H-13	Trip Reduction Program	0	0	0	24	43	67	24	43	67	
(3)	H-23	Increase Bicycle & Pedestrian Facilities TDA	17	27	44	53	85	138	70	112	182	
(4)	H-25	Reduce Jet Aircraft Queuing Delays	0	0	0	4	13	17	4	13	17	
(5)	H-34	Rideshare Program										
(6)		• Park-n-Pool Lots	0	0	0	1	1	2	1	1	2	
(6)		• Employer/Commuter Computer Matching, Promotion, Administration*	FAU, Highway User Revenues	1	2	3	14	42	56	15	44	59
(7)	H-35	Traffic Signal Synchronization	Highway User Rev.	19	22	41	57	114	171	76	136	212
(8)	H-36	Voluntary Retirement of Old Cars		0	0	0	75	142	217	75	142	217
(9)	H-62	Marine Vapor Recovery Operations*		0	0	0	0	25	25	0	25	25
(10)	H-39	Transit Improvements	Fares	0	150	150	0	590	590	0	740	740
		TOTAL PUBLIC SECTOR		\$ 37	\$ 201	\$ 238	\$ 228	\$ 1069	\$ 1297	\$ 265	\$ 1279	\$ 1535
(11)		PRIVATE/HOUSEHOLD SECTOR DIRECT COSTS										
	H-1	Increased Air Passenger Load Factor				Savings						
	H-2	Jet Aircraft Ground Taxi Operation				Savings						
	H-4	Modified Work Schedules				Savings						
	H-5	Carpool Preferential Parking				No Direct Cost						
	H-6	New General Aviation Aircraft Engine Controls							\$ 2	\$ 17	\$ 19	
	H-7	Emissions Standards for New Non-Farm Heavy-Duty Off-Road Vehicles							0	13	13	
	H-11	Electrify Rail Yards*							0	14	14	
	H-15	Emissions Standards for New Farm Equipment							0	12	12	
	H-16	Modify Jet Aircraft Engines: Proposed 1978 Standards							0	156	156	
	H-18	Inspection & Maint. of Light-Duty Vehicles							361	887	1248	
	H-24	Improved Emission Controls for Motor Vehicles							0	401	401	
	H-34	Rideshare Program*							31	92	123	
(12)	H-62	Marine Vapor Recovery Operations*							0	27	27	
	H-64	Apply On-Road Motorcycle Emissions Standards to Off-Road Motorcycles							0	66	66	
	H-72	Improved Trucking Efficiency				Undetermined			0	29	29	
(13)	N-13	Marine Diesel Engine Controls							0	29	29	
		TOTAL PRIVATE/HOUSEHOLD SECTOR							\$ 394	\$ 1714	\$ 2108	

* Denotes a tactic which is assumed to be funded jointly by the public and private sectors.

IV. FUNDING STRATEGIES

As the previous section has shown there is a substantial unfunded public sector portion of the plan recommendations. This is exacerbated by the addition of the transportation control measures for air quality. These measures are to be given priority for implementation according to the Clean Air Act. Thus, unless additional funding is developed, difficult trade-off decisions will be needed to implement the required air quality transportation control measures.

Three approaches have been considered in accomplishing the plan's proposals.

- (A) Reprogramming of projected transportation revenues to the most cost effective measures.
- (B) Reallocation of existing state and federal revenues so that the portion of these revenues allocated to the SCAG region is increased.
- (C) Generation of new funding sources or increases in current tax rates.

A. Reprogramming

The aim of the reprogramming strategy would be to transfer funds earmarked for system development expenditure in one mode to expenditure for either system development in a different mode, or mobile source control measures. Reprogramming might also be referred to as reprioritization, since no new funds would be made available by this strategy.

How could funds be reprogrammed? Table 7-4 is a rough guide to those funds that may be used for multiple transportation purposes. There is enough flexibility among these sources to allow for a degree of reprogramming. For example, high occupancy vehicle lanes could be funded with Federal Aid Interstate or state gas tax monies assumed to be programmed for new highway facilities. Proposition 5 (state gas tax) funds could be employed to finance a portion of the mass rapid transit starter line or the downtown people mover. Federal Aid Urban dollars could be shifted from transit, or street and road capital uses to expenditure for highway capital projects.

Among transportation control measures, it appears at this time that transit improvements, traffic signal synchronization, the Rideshare Program, and increased bicycle and pedestrian facilities could be financed with TDA funds. Traffic signal synchronization, transit improvements, the Rideshare Program, and bicycle and pedestrian facilities would be eligible for highway user funds. Use of TDA funds for purposes other than transit capital and operations would be highly questionable in the areas served by the transit districts.

The reprogramming funding strategy is not recommended at this time because it would require a reduction in planned expenditure for regional

Table 7-4

Redistribution Funding Strategy:
Funding Sources Potentially Available for Redistribution

	<u>Transit Guideway</u>	<u>Transit Buses</u>	<u>Transit Operations</u>	<u>High- Occupancy Vehicle Lanes</u>	<u>Highway Capital</u>	<u>Rideshare</u>	<u>Streets & Roads Capital</u>	<u>Bicycle Facilities</u>
Federal Aid Interstate	x ^a			x	x			
Federal Aid Urban	x	x		x	x	x	x	
Article 19 to State Highways	x ^b			x	x	x ^c		x ^c
Article 19 to Cities and Counties	x ^b					x	x	x
Transportation Development Act	x	x	x	x ^d		x	x	x

- ^a Interstate Substitution
^b Proposition 5 Diversion
^c CALTRANS Non-Capital
^d If intended for transit use

transportation maintenance and development. If, however, other funding strategies fail it may become necessary to use reprogramming as a method for funding.

B. Reallocation

Table 7-5 shows three existing sources of revenue - highway user funds, UMTA Section 3 and state sales tax - from which the SCAG region might reasonably expect a greater allocation. The first, increased state highway capital expenditure, is based on the expectation that the SCAG region should receive the same percentage of state highway capital expenditures as it provides in revenues, its "fair share".

For example, a SCAG document entitled State Highway Expenditures, 1967-1976 states that during that ten year period the SCAG region provided 50% of all highway user revenues collected in the state. During the same period only 40% of highway capital expenditures statewide, and 30% of highway maintenance expenditures were made in the SCAG region. Had the region received 50% of statewide capital expenditures alone, an additional \$700 million would have been expended in the region.

Perhaps it is clearer to state the concept of fair share in terms of the percentage of tax dollars returned to the region.

Currently, approximately 55 cents of each highway user tax dollar collected in the SCAG region is spent here. As Table 7-5 illustrates, increasing this return to 62 cents would result in more than one-half billion dollars of additional expenditures in the region between now and 1988.

UMTA Section 3 is a federal program which provides discretionary funds for transit capital projects on an 80/20 matching basis. The figures in Table 5 assume that those transit capital projects eligible for UMTA Section 3 funds will be funded at the 80% level. However, an allocation of Section 3 funds at the level specified in Table 7-5 would require that 20-30% of all UMTA funds distributed nationwide during that time period be allocated to the SCAG region.

Sales tax revenues could be reallocated from the state to the region in order to finance the Regional Transportation Plan. Assuming that the highway user revenue and UMTA Section 3 reallocations are fully successful, a reallocation of approximately one half cent per dollar of sales tax would be required to finance the remainder of the RTP. In other words, currently one fourth cent of the six cent sales tax is retained in the region for transportation expenditure, while five and three fourths cents is used for other purposes. This strategy would result in three fourths cent being retained for transportation and five and one quarter cents being used elsewhere.

Table 7.5

Reallocation Funding Strategy
(Escalated \$ Millions)

	<u>FY 1979-1983</u>	<u>FY 1984-1988</u>	<u>FY 1979-1988</u>
STATE HIGHWAY CAPITAL EXPENDITURES			
(1) Regional Fair Share*	\$274	\$288	\$562
(2) UMTA SECTION 3			
Mass Rapid Transit Wilshire Starter Line	942	464	1406
Freeway Transit	453	1240	1693
Total UMTA Section 3	\$1395	\$1704	\$3099
(3) SALES TAX			
Reallocation (to fund remainder of RTP)	.10¢/dollar	.35¢/dollar	-
Revenue Generated	\$359	\$2516	\$2875

*Calculation based on the assumption that the SCAG region would receive the same proportion of state capital expenditures as it provides in revenues.

C. Generation of Additional Sources of Funds

A final strategy for financing the Regional Transportation Plan is generation of new funds via a tax rate increase(s) or imposition of a new tax(es).

Table 7-6 indicates what each of a series of different tax rate increases would have to be in order to fund the unfunded portion of the RTP. The top portion of the table shows the tax rate increases needed to finance the public sector gap assuming that UMTA Section 3 and highway user funds are successfully reallocated. The bottom portion of Table 6 indicates tax rate increases required to fund the entire unfunded portion of the RTP (i.e., none of the reallocation strategy is successful).

The first column in Table 7-6, FY 79-83, lists the rate increase required during that period. (The emissions tax and parking surcharge would be new taxes rather than tax increases.) The second column displays the additional tax required to fund measures during the FY 1984-1988 period. For example, in the top portion of the table (assuming successful reallocation) the sales tax would need to be increased immediately to 6.11% and would be increased to 6.47% in fiscal year 1984 in order to finance the gap.

Among the five potential tax sources, the sales tax and the gasoline tax are familiar means of revenue collection. A regional gasoline tax merely implies that any tax increase would be applied regionally rather than statewide, with additional revenues returned to the SCAG region. An indexed regional gasoline tax would link tax increases to some price index - wholesale, consumer, or possibly highway construction. For example, if prices increased by 8% in the first year of indexing, the state gas tax of 7 cents per gallon would also increase by 8%, to 7.6 cents per gallon.

An indexed gasoline tax is justified on the basis of the dwindling purchasing power of highway expenditure dollars. Figure 7-2 illustrates the decline of highway expenditures, in constant 1972 dollars, in the SCAG region. It shows that while maintenance expenditures have been increasing slightly in real dollars, real capital expenditures have plummeted. During the period 1972 to the first quarter of 1978, the cost of highway construction has skyrocketed by nearly 100%! Gas tax indexing would prevent the continued erosion of purchasing power in the future.

The emissions tax and parking surcharge are new taxes that have been frequently discussed in recent years. The former would probably be collected in conjunction with a vehicle inspection and maintenance program, with the charge based on a combination of vehicle miles traveled and emissions. The latter would be just what its name implies - an additional charge added to the normal price of parking a vehicle.

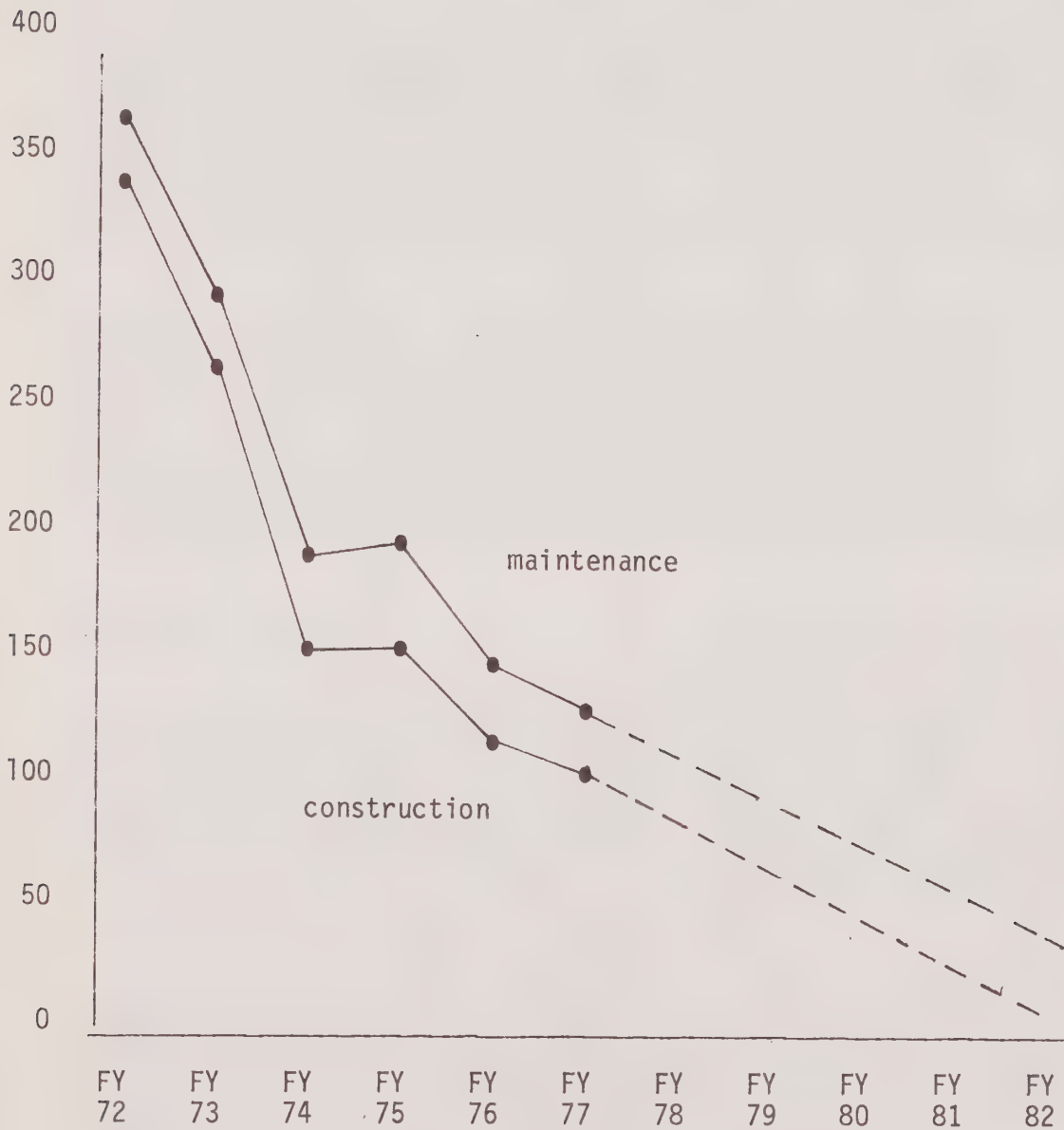
Table 7-6¹

Potential Funding Sources and Tax Rate Increases

	<u>FY 1979-1983</u>	<u>FY 1984-1988</u>
Public Sector Revenue Gap Assuming Reallocation of UMTA Section 3 and State Highway Revenue	\$359 million	\$2516 million
<u>Potential Tax Sources</u>	<u>Rate Increase</u>	<u>(Additional) Rate Increase</u>
a. Sales Tax	.10¢/Dollar	.35¢/Dollar
or b. Regional Gasoline Tax	1.4 ¢/Gallon	8.6 ¢/Gallon
or c. Emissions Tax	.14¢/VMT	.78¢/VMT
or d. Parking Surcharge	12¢/Park	66¢/Park
or e. Indexed Regional Gas Tax	14%/Year	
Total Public Sector Revenue Gap	\$ 2028 million	\$ 4508 million
<u>Potential Tax Sources</u>		
a. Sales Tax	.58¢/Dollar	.25¢/Dollar
or b. Regional Gasoline Tax	8.2 ¢/Gallon	10.5 ¢/Gallon
or c. Emissions Tax	.7 ¢/VMT	.9 ¢/VMT
or d. Parking Surcharge	63¢/Park	75¢/Park
or e. Indexed Regional Gas Tax	20-25%/Year	

Figure 7-2

Historical Expenditures for State
Highways in the SCAG Region
(Millions of Constant 1972 Dollars)



Source: State Highway Program Financial and Statistical Reports, FY 1977,
CALTRANS, and California Highway Construction Cost Index, CALTRANS.

Evaluation of revenue generating measures should be done on the basis of numerous criteria including economic efficiency and equity, political and administrative feasibility, and amount of revenue generated. Preliminary analysis has indicated the following:

- (1) The emissions tax, parking surcharge and to a lesser extent, both gasoline tax schemes serve the dual role of discouraging emissions while raising revenue for the public sector. From an economic efficiency standpoint these measures are desirable because those who pollute are forced to pay a greater portion of the social costs they create.
- (2) The source which appears inequitable on ability-to-pay grounds is the emissions tax. The older car is generally owned by lower income persons who would be least able to pay a higher tax.
- (3) On administrative as well as political grounds the two taxes already in existence, the gas tax and the sales tax, are more easily justified because:
 - a. increases in rates would not entail major administrative start-up costs, and,
 - b. the political difficulties associated with instituting a totally new tax would be avoided.
- (4) The sales tax and indexed gasoline tax would be most likely to provide a revenue base which would keep pace with future cost increases.

CONCLUSIONS

This analysis has shown that during the next ten years a minimum of \$15.5 billion dollars will be available for public expenditure on transportation in this region. This amount forms the basis for the constrained, or funded portion of the Regional Transportation Plan, shown in Tables 7-2 and 7-3. In addition, the plan calls for other public sector expenditures of \$6.5 billion which are unfunded with projected available revenues. Included in this total is \$1.0 billion in unfunded mobile source control measures, and \$5.5 billion in system development projects.

Based on the discussion in Section IV concerning funding strategies, the following combination of tax increases and reallocations of currently unavailable funds is recommended to finance mobile source control measures, and transportation system development projects.

- (1) Gas Tax Indexing Within the SCAG Region. If the price index used is assumed to escalate by 8% yearly, an indexed regional gasoline tax begun in fiscal year 1980 would generate an additional \$1.6 billion in revenue by fiscal year 1988. An indexed gas tax would continue to generate more than \$300 million additional dollars yearly for the region after 1988.

Table 7-7

Financial Plan
(escalated \$ Billions)

	<u>FY 1979-83</u>	<u>FY 1984-88</u>	<u>FY 1979-88</u>
<u>Unfunded Costs</u>			
Mobile Source Control Measures*	.1	.9	1.0
Transportation System Development	1.9	3.6	5.5
Total Regional Transportation Plan	\$2.0	\$4.5	\$6.5
<u>Revenues</u>			
Indexed Regional Gas Tax	.3	1.3	1.6
2¢ Regional Gasoline Tax	.4	.5	.9
Reallocation:			
Highway User Funds	.3	.3	.6
UMTA Section 3	1.4	1.7	3.1
	\$2.4	\$3.8	\$6.2
<u>Remaining Unfunded Costs</u>	\$ (.4)	\$.7	\$.3

* Excludes railyard electrification, reduced jet aircraft delays, voluntary car retirement, and marine vapor recovery operations. These are not considered to be traditional transportation costs.

- (2) Reallocation of Highway User Revenues and UMTA Section 3 Funds to the SCAG Region. As mentioned earlier, a "fair share" return of highway capital funds, and maximum federal contribution for transit capital projects would channel approximately \$3.4 billion into the SCAG region.

Table 7-7 displays a plan which is not quite balanced financially, but which is balanced in another, possibly more important way. It calls for a balanced effort by various groups to make the Regional Transportation Plan a reality. It calls for sacrifice by the private sector in the form of mobile source measure implementation. It calls for sacrifice by the general public within the SCAG region in the form of modestly increased gas tax contributions. Finally, it calls for sacrifice by geographic areas outside of the Southern California region, both inside and outside the state, in the form of increased return of tax dollars to the region via highway capital expenditures and UMTA capital grants.

1 With two exceptions: (1) a portion of the expenditures for Element II of the RTDP (Freeway Transit) is assumed to occur between FY 1988 and FY 1990; (2) all expenditures for highways 7, 30, 47, and 86 are assumed to occur after FY 1988.

5.0 Financial Actions

Multi-modal

(Existing RTP Policy #2, p.5-18) Becomes Recommended New RTP Action

The State Legislature should amend the TDA to relax restrictions (such as the 50% limitation, the maintenance of local effort requirement, and the 15% capital expenditure requirement) which limit the amount of funds a claimant may utilize for transit purposes.

(Existing RTP Policy #4, p. 5-18) Becomes Recommended New RTP Action

Support legislation and amendments to Article 19 of the State Constitution, which would remove the "guideway" transit constraint and allow highway user revenues to be allocated for any type of transportation improvement without percentage limitations.

Recommended New RTP Action # p.

The State Legislature should amend the Transportation Development Act to allow a new category of claims to be filed by existing claimants to implement public transportation control measures to improve air quality, such as ridesharing programs where such transportation control measures have been identified by the designated Regional Transportation Planning Agency through the Regional Transportation Plan.

Recommended New RTP Action # p.

The State Legislature should enact legislation to provide \$25 million for the first year funding of an Old Car Fund and Used Car Dealer Credit. In addition, the Department of Motor Vehicles should increase registration fees for out-of-state vehicles over ten years old and establish a nominal registration fee in lieu of tax for the change of ownership of vehicles purchased to replace vehicles sold to State under the program (H-36).

Recommended New RTP Action # p

The State Legislature should initiate necessary action to allow annual indexing of the gasoline tax. A standard index such as the Consumer Price Index or highway construction price index should be selected as a basis to keep revenues in pace with increasing prices.

Aviation

(Existing RTP Policy #8, p. 5-12) Becomes Recommended New RTP Action

Methods should be sought for spreading the financial burden of constructing any major new general aviation facilities among all areas in the region to be served by that facility.

Transit

(Existing RTP Policy #6, p. 5-18) Becomes Recommended New RTP Action

Encourage increased efficiency of transit operations by development and implementation of transit efficiency standards, allocation incentives, and improved data gathering and analysis capabilities.

(Existing RTP Policy #7, p. 5-18) Becomes Recommended New RTP Action

Encourage transit operators to establish a desired ratio of fares to subsidy. As costs increase over time, it is necessary for financial stability, that either a) this relative level be maintained through periodic review and increase of fares or b) the subsidy share of total costs be increased by increasing taxes.

(Existing RTP Policy #8, p. 5-18) Becomes Recommended New RTP Action

That the available Section 5 funds be made available within the Los Angeles-Long Beach urbanized area only for operating assistance requirements.

(Existing RTP Policy #10, p. 5-18) Becomes Recommended New RTP Action

SCAG will take the necessary united action to ensure the availability of Section 3 funds to meet all reasonable capital requirements as approved in the Regional Short Range Transit Plan.

(Existing RTP Policy #12, p. 5-19) Becomes Recommended New RTP Action

Seek increased funding for transit operations.

(Existing RTP Policy #13, p. 5-19) Becomes Recommended New RTP Action

Every effort shall be made to maximize the use of available federal transportation grants to support transit system operating costs and capital improvements.

(Existing RTP Policy #14, p. 5-19) Becomes Recommended New RTP Action

Encourage local governments to use Federal Revenue Sharing funds for transit.

(Existing RTP Policy #15, p. 5-19) Becomes Recommended New RTP Action

Seek necessary legislation and constitutional changes to facilitate implementation of value capture financing mechanisms by transit districts.

Recommended New RTP Action # _____ p. _____

Examine more closely the possibility of utilizing loan financing as a means to fund transit improvements.

Highways

Recommended New RTP Action # _____ p. _____

The state and region should take the necessary steps to allow federal highway dollars to be used for maintenance when circumstances demand such flexibility.

Recommended New RTP Action # _____ p. _____

The State Legislature should initiate necessary action to allow a greater return of highway user funds within the State to the region in which such funds are generated.

(Existing RTP Policy #16, p. 5-19) Becomes Recommended New RTP Action

Although it would be more appropriate for increases in gasoline taxes to be levied by state governments, it is possible that federal action may result in imposition of an additional gas tax. The region will oppose imposition of any federal tax from which revenues are not retained in the region for public transportation or highway purposes. Federal and state efforts to increase gasoline taxes should be coordinated to avoid simultaneous imposition of taxes on the SCAG region.

(Existing RTP Policy #17, p. 5-19) Becomes Recommended New RTP Action

The state should seek a greater return on our federal highway user taxes than the present 65%.

(Existing RTP Policy #18, p. 5-19) Becomes Recommended New RTP Action

Ensure adequate funding of maintenance, rehabilitation, safety, and operational improvements on existing highway system.

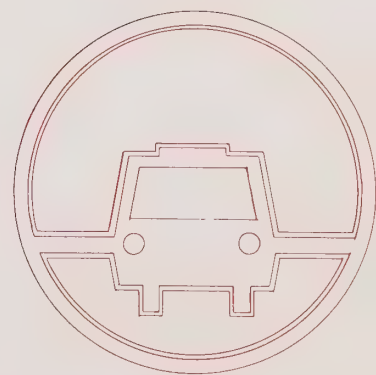
Streets-and-Roads

(Existing RTP Policy #19, p. 5-19) Becomes Recommended New RTP Action

Support a 2-cent-per-gallon gasoline tax increase, with the funds to be returned directly to local governments for transportation purposes.

institutional text
and actions

7.A



7.A INSTITUTIONAL ARRANGEMENTS

In the Southern California region there are a number of state and local government agencies involved in transportation activities. The large number of agencies involved, result in a complex set of interrelationships and procedures for transportation planning, programming, and implementation. These interrelationships are identified in Table 7.1A-1.

A brief survey of the roles and authorities of agencies at each level of government is helpful to understanding the transportation planning and implementation process in this region.

7.1A FEDERAL

Under the Department of Transportation, the Federal Highway Administration (FHWA), Urban Mass Transportation Administration (UMTA), and Federal Aviation Administration (FAA) each fund planning efforts and projects and have established rules and regulations for their programs based on the enabling legislation.

Funds made available for planning are programmed through the regional Overall Work Program (OWP) which documents specific work tasks, dollars to be used on them and which state, regional or local agency will actually complete the work. Included in the OWP are: specific tasks required to maintain the certification of the area so that project funds are available. Examples of the required tasks are development of a regional transportation plan and short range transit plans. These plans become the basis for programming specific projects and justifying their construction.

Of particular interest to state and local agencies are federal requirements for eligibility for the various projects, programs and any formulas or guidelines they use in allocating the funds. While some of these provisions are found in the law, others are left to the discretion of the agency. In addition, agency procedures shape the implementation process.

While federal funding agencies are not involved in the actual construction of projects, they do oversee implementation by local and state agencies. Agency approval must be obtained at varying project phases with final funding for the project available only after satisfactory completion according to agency standards.

Federal law requires that environmental impact analyses be conducted on all projects with the potential of affecting the environment. These documents are reviewed by the funding agency and Environmental Protection Agency as part of the funding approval process. An incomplete or inaccurate document, or one which shows unmitigated negative impacts on the environment can be the basis for denial of project funds.

In addition, under the Clean Air Act Amendments of 1977, standards for air quality have been established. The EPA has specific programs for improving air quality. Such programs must be tied to the transportation sys-

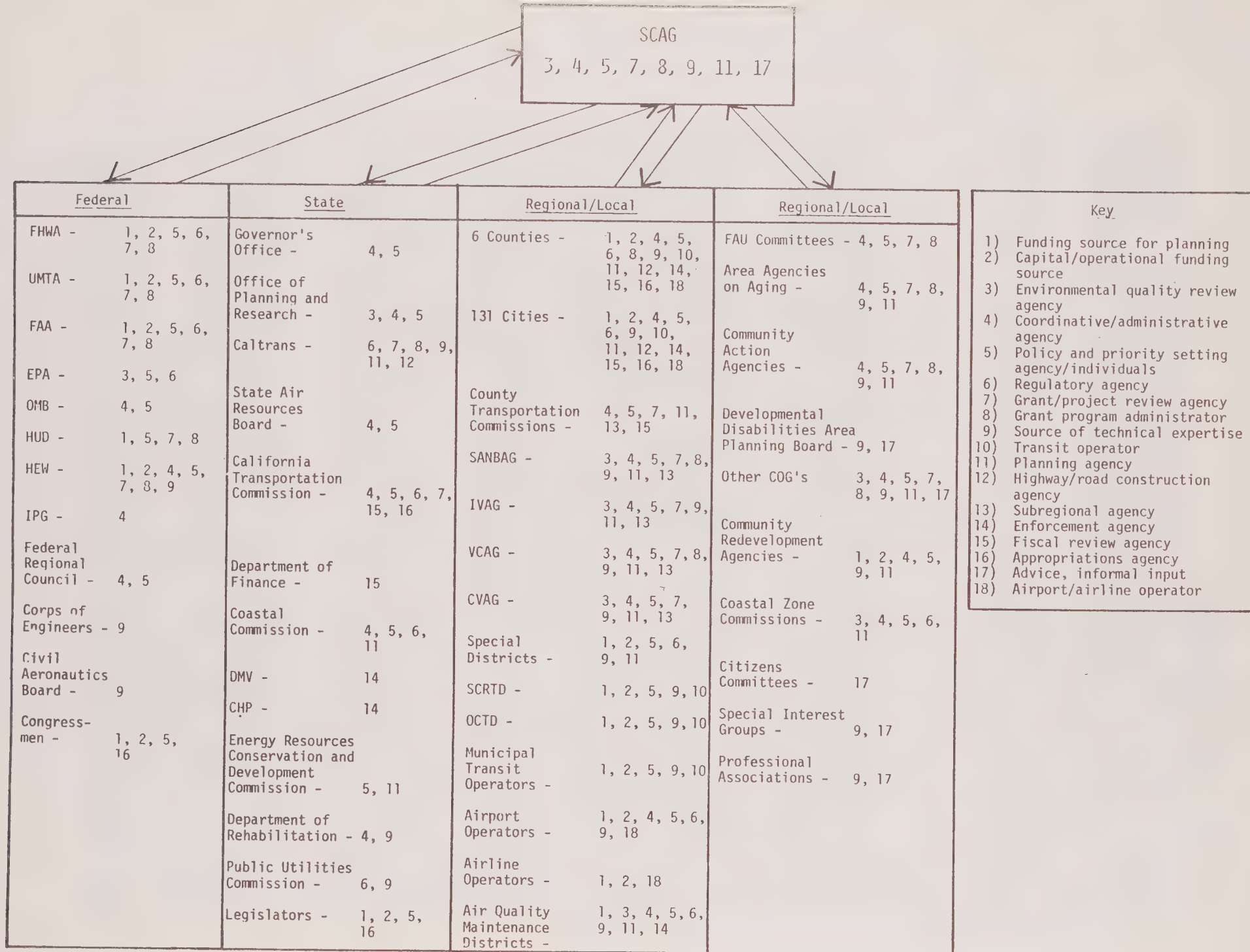


Table 7.1A-1
INTERRELATIONSHIPS BETWEEN SCAG AND OTHER TRANSPORTATION RELATED AGENCIES

tems of these areas and will govern their development. The SCAG region, with the exception of the far eastern desert portions of Riverside and San Bernardino Counties, is a non-attainment area. Therefore, a major area of emphasis of our transportation planning work will be directed towards meeting these clean air standards. The South Coast Air Basin, because of its severe air quality problems, is the main initial focus of these activities.

7.2A STATE

Transportation Planning, programming and implementation procedures at the state level were revised under AB 402 of 1977, providing an opportunity for local and regional agencies to join a partnership with the state.

7.2.1A CALIFORNIA TRANSPORTATION COMMISSION

AB 402 established the California Transportation Commission which assumes the responsibilities of four past boards: The California Highway Commission, State Transportation Board, California Toll Bridge Authority, and the State Aeronautics Board. The Commission has both planning and programming responsibilities. It is responsible for developing a biennial report on transportation to the legislature which serves as a California Transportation Plan. It will include an evaluation of significant transportation issues, an overview of necessary future investments, and recommendations for allocation formulas for highway funds. The state plan will consider all adopted regional transportation plans and long range issues, such as energy, which affect transportation.

The Commission has considerable authority in the regional and statewide programming of projects. It determines an estimate of state and federal revenues available to local, regional and state agencies under several funding programs including all state and federal highway funds processed through the state highway account, Proposition 5 diversion transit projects, capital improvements under the State Aeronautics Account, and Toll Bridge Authority funds. Local, regional and state agencies must be consistent with these estimates in their programming of projects.

A specific procedure and time-table are established for development of local, regional and state TIP's. The California Commission receives regional TIP's from throughout the state and a proposed TIP from Caltrans. The regional TIP's are consolidated into a state TIP unless one of three findings is made: overriding statewide significance, insufficient funds, or a conflict between regional TIP's. In the case of one of these findings, a regional TIP project can be dropped or a different project added. Once the statewide TIP is adopted by the Commission, it is implemented by all related state, regional, and local agencies.

7.2.2A

Department of Transportation

Another principal actor on the state level is the Department of Transportation (Caltrans). Caltrans has planning, programming and implementation responsibilities, particularly for the state highway system. The department is a planning agency in that it studies long and short range needs for transportation in the state and proposes means of meeting those needs. It coordinates and develops research programs on transportation issues of statewide concern.

It is a programming agency in that it develops a proposed statewide TIP for submittal to the California Transportation Commission. It also estimates the funds available for TIP preparation and supplies this revenue estimate to the Commission for its final action.

Caltrans' role as an implementing agency gives it additional authority in the programming area. Caltrans has considerable control over the scheduling and completion of any work on state highways. Also through delegation by the Federal Highway Administration, Caltrans is involved in processing and approving local grant applications under federal highway programs. In Riverside-San Bernardino, Oxnard-Ventura-Thousand Oaks, and Simi Valley urbanized areas Caltrans has been named the designated recipient for UMTA Section 5 funds, giving it the responsibility of administering these transit funds. Caltrans also administers UMTA special funds for elderly and handicapped transit, as well as special bicycle funds.

7.2.3A

State Air Resources Board

The Air Resources Board (ARB) is designated the state air pollution control agency for all purposes set forth in federal law. Under its mandate, the ARB is responsible for setting ambient air and vehicle emission standards and for administering Federal and State requirements. The ARB also reviews and comments on a multitude of programs which are not solely or primarily related to air quality. For example, the ARB reviews Regional Transportation Plans, and Environmental Impact Reports and Statements on projects of major significance.

The ARB is designated the State agency responsible for the preparation of the State Implementation Plan required by the Clean Air Act. Under the Lewis Act, the ARB shall approve the Air Quality Management Plan unless it finds, after public hearing, that the plan does not include all reasonable and available methods to achieve and maintain the State ambient air quality standards. Upon such a finding, the ARB shall revise the submitted plan and approve it by June 1, 1979.

7.2.4A

State Office of Planning and Research

The State Office of Planning and Research is involved in transportation development through two channels. First is any statewide development or land use policies it adopts, such as those incorporated in the State Urban Development Strategy. The second is through its role as the statewide clearinghouse for review of Federal Grant Applications. OPR comments on the conformance of potential projects with statewide policies and their potential impact on the environment.

7.3.A REGIONAL

In this region, SCAG is the principal agency involved in transportation activities. Others include the South Coast Air Quality Management District, which is concerned with transportation as it affects air quality, and the South Coast and South Central Coastal Commissions which govern development in the coastal areas.

As recommended by the Governor, SCAG has been designated by the federal Department of Transportation the Metropolitan Planning Organization (MPO) for this region. Under this designation, SCAG serves as the coordinating and approval agency for all transportation planning undertaken with federal funds. SCAG passes through much of these federal funds to local agencies in the region which in turn complete studies and plans for local and regional transportation development.

As the MPO, SCAG is also responsible for a regional transportation plan (RTP). This requirement is similar to that under state law (AB 402) where SCAG has been designated Regional Transportation Planning Agency. As a part of the federally-required RTP, SCAG incorporates transit operators' plans in the transportation system management and long range transit elements of the RTP. The RTP also includes major components on highways, aviation, and goods movement, in response to Federal and State mandates. Transportation strategies for improving air quality are also being developed jointly with the South Coast Air Quality Management District for incorporation in the RTP.

The adopted regional transportation plan serves as the policy basis for all transportation programming in the region, and in particular for the transportation improvement program (TIP) required under both federal regulations and state law (AB 1246/ AB 402).

While there are different requirements for the state and federal TIP's, SCAG will prepare one consolidated TIP containing all required data. Essentially it will include all transportation projects for which local and state agencies seek federal or state funds. The California Transportation Commission has authority over projects funded from those moneys under its jurisdiction (as previously discussed) and the federal agencies will have authority over projects funded from federal dollars, except those funds under the jurisdiction of the California Transportation Commission.

Under state law, SCAG bases its TIP for the four county transportation commission counties (Los Angeles, Orange, Riverside, San Bernardino) on TIP's submitted to it by the commissions. SCAG has also agreed to accept county TIP submittals from IVAG and VCAG for their respective jurisdictions. SCAG may revise these commissions' TIP's in certain instances. The entire regional TIP must be consistent with the RTP.

Consolidated into the TIP-approval process are SCAG's A-95 Clearinghouse responsibilities. SCAG is designated by the Governor on behalf of the federal Office of Management and Budget to review all federally-funded projects for consistency with regional plans and policies, for their environmental impacts, and to give interested agencies and parties notice of these proposed projects. SCAG then forwards comments it has and those it receives from concerned agencies to the project sponsor and funding agency for their use in determining whether to fund the project.

As state-designated Regional Transportation Planning Agency, SCAG administers the Transportation Development Act funds (sales tax funds available for transit, streets and roads, bicycle/pedestrian facilities projects). As in the case of the TIP, SCAG bases its approval of projects under these funds in the four commission counties on lists of projects submitted to it from the commissions. These lists can be revised if they are inconsistent with the plan or are an inappropriate use of funds under the law. In Ventura and Imperial Counties, IVAG and VCAG recommend projects for approval. SCAG has a further responsibility to determine whether a portion of the TDA funds will be used for bicycle/pedestrian projects and, jointly with the commissions in Los Angeles and Orange Counties, if a portion of the funds will be available for community level transit projects.

SCAG is also the designated recipient for UMTA Section 5 funds for transit projects in the Los Angeles-Long Beach Urbanized Area. It determines policies for use of these funds, and allocates the funds among the three counties in that urbanized area. Again, state law provides for the county transportation commissions to allocate the funds within their counties with SCAG's final approval through the TIP.

SCAG is also responsible for the Federal Aid Urban Program for urbanized areas over 50,000 in population. SCAG approves the programming for these dollars, the system of roads, and the urban area boundaries based on approvals received from the four county commissions and VCAG.

SCAG is not an implementing agency per se. It relies on its counties and cities, transit and airports operators, Caltrans and other operating agencies to implement mutually developed policies and plans. SCAG serves only as initiator and coordinator of programs to implements its policies.

7.4A LOCAL AGENCIES

There are a number of local agencies involved in transportation efforts in the SCAG region. Four groups of agencies have predominant roles: county transportation commissions, designated subregional agencies, cities and counties, and transit and airport operators. The planning, programming and implementation responsibilities of each are as follows:

7.4.1A County Transportation Commissions

County Transportation Commissions were established in 1977 in Los Angeles, Orange, Riverside and San Bernardino Counties by AB 1246. These commissions set policies for and coordinate transportation development in their respective counties. They are given decision-making authority over short-range capital and service planning and programming for transit and highway projects. This includes the allocation of federal and state project funds within their county areas and establishment of priorities for project implementation.

Each county commission has requested that SCAG designate it to coordinate transportation planning in its county. This involves a role for them in the Overall Work Program process. In most cases the commission delegates the planning responsibilities to other agencies such as the county or transit operators while overseeing their efforts and consolidating their work into a county-wide short range transit plan and other related products.

The commissions have numerous programming responsibilities. They compile a county-wide TIP for submittal to SCAG as a part of the regional TIP. They allocate TDA transit and bicycle/pedestrian funds in their counties and jointly decide with SCAG if a portion of these funds should be available for Article 4.5 community level transit projects (Los Angeles and Orange Counties). The commissions recommend service and productivity improvements to transit operators within their counties and make performance audits of the operators. They also allocate FAU and UMTA Section 5 funds among their jurisdictions. As in the case of SCAG, the commissions use the programming of these funds to implement policies they have adopted for transportation development. All federally and state funded projects they approve must also be consistent with the regional transportation plan.

As in the case of SCAG, the commissions are not implementing agencies themselves. But to the degree that they set transportation priorities and program funds, they guide local agencies and Caltrans in their implementation process.

The Los Angeles Commission is given two additional notable authorities. One is to place a sales tax measure on the ballot to generate revenues for transit purposes. Second is to report to the legislature on the status of transportation planning and programming in the county and to recommend any changes necessary to improve them.

With the growing importance of the transportation system in improving air quality, the commissions are becoming more active in this field as well. The San Bernardino Commission, for example, is also serving as the Air Quality Coordinating Committee for that county.

7.4.2A

Designated Subregional Agencies

In the two counties where transportation commissions do not exist (Imperial and Ventura), SCAG has designated subregional transportation planning agencies to assume similar responsibilities. In Ventura County this agency is the Ventura County Association of Governments; in Imperial County it is the Imperial Valley Association of Governments. These agencies coordinate their counties' planning tasks under the Overall Work Program.

Each of these agencies is involved in programming activities for their counties such as review of TDA and FAU projects. While these agencies do not have the legal authorities of the four commissions, SCAG looks to them as the decision-making bodies in these counties. SCAG depends on them for input on issues affecting their areas and jointly sponsors hearings and workshops on such topics as the regional transportation plan and unmet transit needs.

7.4.3A

Cities and Counties

Cities and counties have a primary role in planning and implementing Southern California's transportation system. Local jurisdictions are required by state law to develop local circulation elements. These elements should be consistent with countywide and regional transportation plans. They are the initiating agencies for most highway and transit projects. They are also the implementing agencies for these projects. Locally elected officials also comprise the governing boards of many other transportation agencies such as county transportation commissions, other designated subregional agencies such as IVAG and VCAG, transit and airport boards and joint powers entities (such as airport land-use commissions), and the SCAG Executive and Policy Committees.

Subregional air quality planning agencies have been designated by SCAG to prepare plans identifying measures or policies to improve air quality in their jurisdictions. Los Angeles, Orange, Riverside, and San Bernardino Counties and the City of Los Angeles are acting in this capacity. AQMP Coordinating Committees have been established to advise the subregional air quality planning agencies in each county. In each of the counties the Executive Director of the County Transportation Commission serves on the committee to assure close coordination of local transportation/air quality planning.

7.4.4A

Transit Operators/Airport Operators

Transit and airport operators are also planning and implementing agencies. They develop plans for their future development, such as short range transit plans for transit operators or master plans for airport operators. These plans meet state and federal requirements and provide the basis and justification for their application for funds for implementing projects. Throughout the planning and implementation process, operators function within the procedures and restrictions established by local, regional, state and federal agencies as described below.

7.5A

INTERRELATIONSHIPS

Planning is required by state and federal law and is a prerequisite to receiving federal and state project grants. The transportation plan enumerates specific types of programming actions which should be used to implement broader policies.

Under federal law*, programs of projects resulting from regional plans, for federal highway and transit funds are submitted to the Secretary of DOT. These programs are based on a continuing transportation planning process which results in multi-modal transportation plans and programs. Federal rules and regulations** further specify that programs of highway and transit projects included in the Transportation Improvement Program

* 23 USC 105, 134 (a) and 135 (b); 49 USC 1602, 1603 (a) and 1604

** 23 CFR 450, Subpart C (Section 450.306)

must be consistent with and based on the area's regional transportation plan. Federal aviation projects are not now required to be in the regional TIP's. Instead, to be eligible for funding they must be included in the National Airport System Plan (NASP) developed by the Federal Aviation Administration. Inclusion in a regional transportation plan is of great assistance in qualifying for inclusion in the NASP.

State law (AB 1246/AB 402) requires that all projects (highway, transit, aviation) in the county and regional TIP's be consistent with the regional transportation plan. Federal law recognizes regional TIP's and all projects in the federally-required TIP (using federal dollars) must be consistent with the regional plan; therefore, all fundable projects in the state TIP using federal dollars must also be consistent. State law provides for expenditure of those funds under the California Commission's jurisdiction on only those projects included in the State TIP. Consequently, regional transportation plans and the local plans incorporated into them are the policy basis for programming projects on the local, regional and state level.

The transition from planning to programming to implementation is not this simple or direct; it is a dynamic interchange between the involved agencies. A number of factors can affect this interchange.

First, priorities and policies can change as circumstances change. For example, as specific types of funds become more limited (or with the potential for new sources of these funds), specific projects will be raised or lowered on the priority list for implementation. Varying federal and state pressures for implementation of their policies (e.g. improved air quality) also affect the type of projects funded and built. At times, local or regional policies can run into public opposition as in the case of the Santa Monica Diamond Lane, where public opinion caused the reevaluation of this policy and termination of the project.

A difference in priorities and policies between federal, state, regional and local agencies can also affect the planning, programming and implementation relationship. For example, a local agency may not concur in a regional goal. That agency may refuse or delay implementation measures in its jurisdiction. A realistic plan and implementation process cannot discount this element and the numerous other variables noted above in developing workable compromise proposals.

INSTITUTIONAL ARRANGEMENTS ACTIONS

Existing RTP Action #12 p. 6-19

The CTC's and transit operators will prepare an annual Short-Range Transit Plan and Transit TIP consistent with the RTP and subregional transportation plans.

Recommended Change RTP Action #12 p. 6-19

Agencies designated by the CTC's, IVAG and VCAG will prepare an annual Short-Range Transit Plan and Transit TIP consistent with the RTP.

Existing RTP Action #14 p. 6-19

SCAG, the CTC's and the transit operators will execute and comply with the Memorandum of Understanding.

Recommended Change to RTP Action #14 p. 6-9

SCAG, the CTC's, and the transit operators will execute and comply with the Public Transit Operator Memorandum of Understanding.

Existing RTP Action #6 p. 6-18

Transit operators, the CTC's, and SCAG will annually update the elements of the Short Range Transit Plans for the elderly and handicapped including procedures and programs to reduce or eliminate barriers and increase the number of fully accessible vehicles in the region's transit and paratransit fleets.

Recommended Change RTP Actions #6 p. 6-18

Agencies designated by the CTC's, IVAG and VCAG will annually update the elements of the Short Range Transit Plans for the elderly and handicapped including procedures and programs to reduce or eliminate barriers and increase the number of fully accessible vehicles in the region's transit and paratransit fleets.

Existing RTP Policy #20 p. 5-10

Each public transit operator will prepare a Short Range Transit Plan (SRTP) as required to meet federal guidelines.

Recommended Change RTP Policy #20 p. 5-10

Agencies designated by the CTC's, IVAG, and VCAG will prepare a Short Range Transit Plan (SRTP) as required to meet federal guidelines.

Recommended New RTP Action # , p.

SCAG will assume an advocacy role with state and federal governments to make transportation planning and programming requirements more responsive to local and regional needs.

Recommended New RTP Action # , p.

SCAG will develop and execute regional transportation memoranda of understanding with the County Transportation Commissions, Imperial Valley Association of Governments and Ventura County Association of Governments enumerating transportation roles and responsibilities of these agencies in relationship to SCAG and vice versa.

Recommended New RTP Action # , p.

SCAG will work with Caltrans to update the current transportation memorandum of understanding between them.

Recommended New RTP Action # , p.

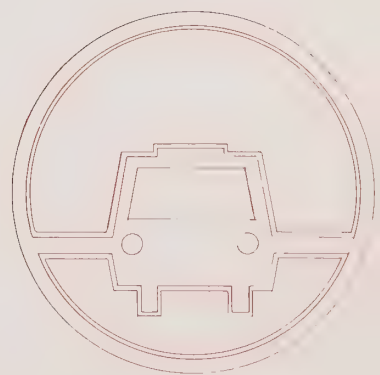
SCAG will periodically review transportation planning, programming and project review processes and seek to reduce review time and red tape.

Recommended New RTP Action # , p.

The county transportation commissions and the subregional air quality planning agencies should clarify transportation/air quality roles and responsibilities.

appendix

8.0



APPENDIX G

Preliminary Staff Recommendations - South Coast Air Basin Mobile Sources

10/10/78
D. Knight

Measure Number	Name	RHC	NOx	1987 Emissions Reductions* (tons/day)			TSP
				CO	SOx		
H-1	Increased Air Passenger Load Factor	.9	--	2.2	.1	1.0	
H-2	Jet Aircraft Ground Taxi Operation Improvements	2.7	--	14.2	.9	6.6	
H-4	Modified Work Schedules	3.4	2.4	29.2	2.8	4.2	
H-5	Parking Management: Carpool Preferential Parking	.3	.4	2.6	--	0.1	
H-6	New General Aviation Aircraft Engine Controls	5.6	(+3.5)	97.6	--	--	
H-7	Emission Standards for all New Non-Farm Heavy-Duty Off-Road Vehicles (construction, landfill & other vehicle types)	5.7	28.3	72.6	--	--	
H-11	Electrify Railroad Switching Yards	4.4	17.7	7.3	3.8	1.3	
H-13	Trip Reduction Proram	11.3	13.7	92.6	1.2	1.8	
H-15	Emission Standards for New Farm Equipment	1.9	0.7	18.2	--	--	
H-16	Modify Old and New Jet Aircraft Engines to Meet Proposed 1978 Federal Standards	21.4	0.8	29.5	--	--	
H-18	Inspection and Maintenance of Light-Duty Vehicles	61.7	66.6	500.0	--	--	
H-23	Increased Bicycle and Pedestrian Facilities	.5	.4	5.0	.5	.8	
H-24	Improved Emission Controls for Motor Vehicles	52.0	83.4	561.0	--	20.6	
H-25	Reduce Jet Aircraft Queuing Delays	.5	--	2.3	.1	1.1	
H-34	Rideshare Program	6.6	8.0	54.4	1.4	1.4	
H-35	Traffic Signal Synchronization	0.9	(+.3)	8.7	--	--	
H-36	Voluntary Retirement of Older Cars	9.2	1.9	76.8	--	--	
H-62	Marine Vapor Recovery Operations	6.7	--	--	--	--	
H-64	Off-Road Motorcycle Emission Standards	2.6	(+0.03)	2.8	--	--	
H-72	Improved Trucking Efficiency	4.1	9.7	38.0	1.7	.9	
H-85	Freeway Facility and Transit Improvements Supporting High-Occupancy Vehicle Movement	1.8	2.1	14.2	.1	.2	
H-86	Wilshire Rail Line	.3	.4	2.4	--	--	
H-87	Los Angeles Downtown People Mover	.1	--	1.0	--	--	
H-88	Congestion Relief-Freeway Widening	1.9	(+.1)	15.8	--	--	
H-89	Transit Improvements	.6	.8	4.8	.1	.1	
N-13	Marine Diesel Engine Controls	--	.4	--	--	--	
TOTAL		207.1	233.77	1653.2	12.7	40.1	
Emission Reduction by 1987 Needed from all Sources to Meet Federal Standards		309	368	1622	226 (State)	52 (State)	

*Adjusted effectiveness based on technological improvements with corrections made for Aldehydes and SCAG 78

Percent of Target		67%	64.7%	100+%	5.6%	77%
Proposed Measures:	Percent of Projected 1987 Mobile-Source Emissions					
		45.4%	38%	42%	15%	39.5%
	Emissions (all Sources)	815.12	1160.5	4102.3	399.9	285.4
	1987 Mobile-Source Emissions	455.62 (56%)	617.3 (53%)	3850.5 (94%)	83.7 (21%)	101.4 (36%)

APPENDIX G Continued

#H-1 - RHC/CO/SO_x/Part

CONTROL MEASURE NAME: Increased Air Passenger Load Factor

DESCRIPTION/CONTROL METHOD TO BE USED: Increase the jet commercial air passenger load factor to 70%. This would result in an 11% reduction in total operations.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Airline Operators, PUC, CAB; 1979

#H-2 - RHC/CO/SO_x/Part

CONTROL MEASURE NAME: Jet Aircraft Ground Taxi Improvements

DESCRIPTION/CONTROL METHOD TO BE USED: Increase engine speed during idle and decrease engine use during taxiing operations by using fewer engines to taxi. Three engine planes would taxi on one engine; four or more engine planes would taxi on two engines.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Airline Operators, FAA; 1983

#H-4 - RHC/CO/NO_x/SO_x/Part

CONTROL MEASURE NAME: Modified Work Schedules

DESCRIPTION: Use 4/40 (4 days-40 hour week) work schedule to reduce vehicle trips, and use staggered work hours to improve use of transportation facilities.

CONTROL METHOD TO BE USED: Encourage the use of 4/40 arrangements and staggered work hours. In addition to reduced numbers of work trips and congestion relief the peak transit load is reduced and broadened. Staggered or flexi-work hours can cause up to a 4% reduction in peak traffic (the Impacts of Feasible

APPENDIX G Continued

staggered work hours and Compressed Workweek policies on Highway Networks, Transportation, Economics, Organizations, and Employees, Aug. 1977), and up to a 28% reduction in peak traffic can be realized with a 4-day work week on tested sites. Some staggered work hour systems are already in operation in the region; however, there has not been an effort to coordinate the entire system. In addition, if 20% of the work force is employed with a 4/40 workweek, and 50% of those persons don't replace their worktrips, weekly trips will be reduced by 8% of the weekly trips per person, or an average of over 200,000 trips per day. The congestion relief will allow for higher vehicle speeds, and fewer stops and idling.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Private and Public Employers; 1981

#H-5 - RHC/NO_x/CO/Part

CONTROL MEASURE NAME: Parking Management: Carpool Preferential Parking.

DESCRIPTION: Reduce parking supply for single occupant vehicles by 30% in all commercial/industrial employment centers in region and reserve these parking spaces for rideshare vehicles.

CONTROL METHOD TO BE USED: Increase terminal time for single-occupant vehicles, reducing terminal time for carpools, in order to induce a shift to ride-sharing thereby reducing VMT and vehicle trips. Would require appropriate regulations on both private and public lots.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Local Governments, Employers, Parking Lot Operators; 1981

APPENDIX G Continued

#H-6 - RHC/NO_x/CO

CONTROL MEASURE NAME: General Aviation Aircraft Engine Emission Controls

DESCRIPTION/CONTROL METHOD TO BE USED: Implement "enleanment" of general aviation fuels through modification of engines including improvements in cooling fins, refinements to fuel management systems, addition of acceleration pumps on carbureted engines, increased application of fuel injection and improvement to the fuel injection systems, improvements in valve and/or ignition timing methods, balancing of the induction system, and improved fuel vaporization.

IMPLEMENTING AGENCY/YEAR: ARB/Aircraft Manufacturers; 1983

#H-7 - RHC/NO_x/CO

CONTROL MEASURE NAME: Emission Standards - New Off-Road Heavy Duty Non-Farm Equipment

DESCRIPTION: Establish exhaust emission standards for all new off-road heavy-duty equipment (includes: construction, land fill, etc.) comparable with standards for highway heavy-duty trucks.

CONTROL METHOD TO BE USED: Technological improvements: Exhaust conditioning and engine modifications for gasoline-powered; engine modifications for diesels.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: ARB, Manufacturers; 1983

APPENDIX G Continued

#H-11 - RHC/NO_x/CO/PART

CONTROL MEASURE NAME: Electrify Railroad Switching Yards

DESCRIPTION: Replace existing diesel railroad operations in classification/switching yards with overhead electric systems.

CONTROL MEASURE TO BE USED: This tactic envisions modifying the existing classification yards at Colton, East Los Angeles (Hobart Yard), South Central Los Angeles County (Watson Yard), and the Harbor Service Railway at Port Hueneme, Long Beach, and Port of Los Angeles with electric systems. The electric switchers will do all of the work in the yard, reducing railroad emissions by an estimated 75%. New yards would be electrified.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Railroads, 1983

#H-13 - RHC/NO_x/CO/SO_x/Part

CONTROL MEASURE NAME: Trip Reduction Program

DESCRIPTION: A regional promotional effort aimed at limiting future increases in trip-making.

CONTROL METHOD TO BE USED: Encourage the region's population to maintain its existing average daily trip frequency (i.e. 3.4 average daily trips per person) rather than increasing that daily trip frequency to the level projected for 1990 (i.e. 3.6 average daily trips per person). A regional media campaign to promote the regional goal of improving air quality through voluntarily curtailing increases in automobile tripmaking.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: SCAG, County Transportation Commissions, Caltrans, Local Governments; 1980

APPENDIX G Continued

#H-15 - RHC/NO_x/CO

CONTROL MEASURE NAME: Emission Standards - New Farm Equipment

DESCRIPTION: Establish same emission standards for new farm equipment that have been promulgated for on-road heavy duty equipment.

CONTROL METHOD TO BE USED: Technological improvements.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: ARB, Farm Equipment Manufacturers; 1983

#H-16 - RHC/NO_x/CO

CONTROL MEASURE NAME: Proposed 1978 Emission Standards - Jet Aircraft Engines

DESCRIPTION: Achieve promulgated standards for jet aircraft engine emissions by retrofitting old engines and developing controls on new engines.

CONTROL METHOD TO BE USED: Combustion chamber improvements, injection modifications, emission control devices, etc. Requires appropriate federal regulations.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: FAA/EPA, Manufacturers and Airline Operators; 1983

APPENDIX G Continued

#H-18 - RHC/NO_x/CO

CONTROL MEASURE NAME: Annual Inspection and Maintenance of Light-Duty Vehicles

DESCRIPTION/CONTROL METHOD TO BE USED: This program requires full mandatory inspection of light duty motor vehicles at state supervised inspection stations using loaded tests. Necessary tuning and repairs will be required of those vehicles failing to pass the inspection. (In order to obtain an extension for ozone and carbon monoxide from 1982 to 1987, EPA is requiring a periodic inspection of all light duty vehicles which results in a specified level of emission reduction. These requirements preclude a change of ownership program in the South Coast Basin.)

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: ARB, California Department of Consumer Affairs, Department of Motor Vehicles; 1982.

#H-23 - HC/NO_x/CO/SO_x/Part

CONTROL MEASURE NAME: Increased Bicycle/Pedestrian Facilities

DESCRIPTION: Decrease automobile trips through diversion to bicycle and pedestrian trips for all trip purposes. Both the LARTS 1976 Urban and Rural Travel Survey and the Los Angeles County 1977 public opinion survey indicated that a sizeable percentage of all trips are made by walk and bicycle modes, and, if proper facilities were available, an increased number of walk/bicycle trips would be made.

CONTROL METHOD TO BE USED: An additional amount of SB 821 monies or similar funding will be made available to construct new bicycle facilities (bikepaths, bike racks, etc.) and pedestrian facilities (sidewalks, over-crossings, etc.). In addition, cities and counties will consider amending zoning, subdivision, and building ordinances to require the provision of bikepaths, over-crossings and pedways, bike racks and other facilities to encourage walking and bicycle riding.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Caltrans, Local Government, and Private Sector; 1980

APPENDIX G Continued

#H-24 - HC/NO_x/CO/Part

CONTROL MEASURE NAME: Improved Emission Controls For Motor Vehicles.

DESCRIPTION: Implement more stringent vehicle (light-duty and Heavy Duty) exhaust emission controls, as described below:

Existing and Proposed Emission Standards*

	<u>HC</u>	<u>NO_x</u>	<u>CO</u>	<u>Part</u>
<u>Light Duty Autos</u>				
Existing Exhaust Emission Standard (gm/mi)	.41	.4	7.0	.05**
Proposed Exhaust Emission Standard (gm/mi)	.2	.2	3.5	.02
Existing Evaporative Emission Standard (gm/test)	2.0			
Proposed Evaporative Emission Standard (gm/test)	1.0			
Existing Tire Wear Emission Rate (gm/mi)				.20
Proposed Tire Wear Emission Standard (gm/mi)				.08
% Reduction in 1987 Emissions	11.8%	11.8%	12%	27%
<u>Light Duty Trucks</u>				
Existing Exhaust Emission Standard (gm/mi)	.41	.4	9.0	.05**
Proposed Exhaust Emission Standard (gm/mi)	.2	.2	3.5	.02
Existing Evaporative Emission Standard (gm/test)	2.0			
Proposed Evaporative Emission Standard (gm/test)	1.0			
Existing Tire Wear Emission Rate (gm/mi)				.20
Proposed Tire Wear Emission Standard (gm/mi)				.08
% Reduction in 1987 Emissions	11.8%	11.8%	12%	27%
<u>Medium Duty Trucks</u>				
Existing Exhaust Emission Standard (gm/mi)	.55	1.25	9.0	.05**
Proposed Exhaust Emission Standard (gm/mi)	.2	.2	3.5	.02
Existing Evaporative Emission Standard (gm/test)	2.0			
Proposed Evaporative Emission Standard (gm/test)	1.0			
Existing Tire Wear Emission Rate (gm/mi)				.20
Proposed Tire Wear Emission Standard (gm/mi)				.08
% Reduction in 1987 Emissions	17.6%	30.3%	15%	27%
<u>Heavy Duty Gas Trucks</u>				
Existing Exhaust Emission Standard (gm/mi)	2.85	5.35	29.7	.14**
Proposed Exhaust Emission Standard (gm/mi)	1.0	2.0	9.0	.06
Existing Evaporative Emission Standard (gm/test)	2.0			
Proposed Evaporative Emission Standard (gm/test)	1.0			

APPENDIX G Continued

	<u>HC</u>	<u>NO_x</u>	<u>CO</u>	<u>Part</u>
<u>Heavy Duty Diesel Trucks</u>				
Existing Exhaust Emission Standard (gm/mi)	2.85	5.35	29.7	1.3 **
Proposed Exhaust Emission Standard (gm/mi)	1.0	3.0	9.0	.13
Existing Evaporative Emission Standard (gm/test)				
Proposed Evaporative Emission Standard (gm/test)	1.0			
Existing Tire Wear Emission Rate (gm/mi)				.66
Proposed Tire Wear Emission Standard (gm/mi)				.13
% Reduction in 1987 Emissions	64.9%	43.9%	69.7%	41%

*For 1983 model year and beyond.

**Based on emission estimates.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: ARB, Auto Manufacturers;
1983 model year.

#H-25 - HC/CO/SO_x/Part

CONTROL MEASURE NAME: Reduce Jet Aircraft Queing Delays

DESCRIPTION/CONTROL METHOD TO BE USED: Eliminate aircraft delays and excessive idle/taxi times by controlling the landing and departure times, utilizing "gate hold" procedures, and increasing the capacity and improving the efficiency of airport runway and terminal facilities. The aim of this measure is to reduce the average taxi-idle period as well as ease the congestion on runways and aircraft boarding areas. The measure would improve aircraft traffic flow by reducing peak period scheduling of flights and making physical improvements to airport facilities to ensure that aircraft spend the least amount of time possible on the ground taxiing and idling.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: FAA Airport Operators, Airlines; 1983.

APPENDIX G Continued

#H-34-RHC/NO_x/CO/SO_x/PART

CONTROL MEASURE NAME: Employees Ridesharing Program

DESCRIPTION: A region-wide program aimed at increases in ridesharing for the home-based work trip (i.e., increased commuter average vehicle occupancy) through promotion and matching of carpools, vanpools, buspools and taxipools. Each employer or firm composed of at least 100 employees would operate its own program, while programs in firms of less than 100 employees would be administered by an outside agency. Capture rates, varying according to the size of the firm and representing some 639,000 new ridesharers in 1990, have been assumed at the following levels:

<u>Employees</u>	<u>Capture Rate</u>
500 +	20%
250 - 499	15%
100 - 249	10%
1 - 99	2.5%

Capture rates relate only to rideshares in addition to those that might already be naturally formed, include only those ridesharers commuting in 3+ person carpools (or their equivalent in terms of vanpools, buspools, or taxipools) and exclude public transit work trip-makers. Any additional costs other than for matching, promotion and program administration -- expenditures which may be required in order to induce the additions in ridesharing sufficient to realize the assumed capture rates -- have not been identified or included in this analysis.

CONTROL MEASURE TO BE USED: Induce a shift to high occupancy vehicle mode through travel cost reduction incentives to work commuters -- thereby reducing VMT and improving air quality. Method would focus by promotion and matching services but may require additional incentives such as preferential parking or some form of travel subsidy.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Local Governments, Employers, Commuter Computer; 1979

APPENDIX G Continued

#H-35 - RHC/NO_x/CO

CONTROL MEASURE NAME: Traffic Signal Synchronization

DESCRIPTION/CONTROL METHOD TO BE USED: The modification of traffic signals at 6600 high volume intersections. The modifications will entail the installation of an interconnecting system of computer-regulated traffic signals which are synchronized at the system level and have the ability to modify their cycle board on traffic volumes. This system will reduce traffic delays, improve traffic flow and average speed thereby reducing emissions.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Local Cities, Counties and CALTRANS, 1979-1987.

#H-36 - HC/NO_x/CO

CONTROL MEASURE NAME: Voluntary Retirement of Older Cars

DESCRIPTION: The objective of this program is to increase the rate at which older cars drop out of the vehicle fleet. Older vehicles constitute a disproportional amount of light duty vehicle emissions. For example, a typical auto which is over 12 years old and is driven only 4000 miles/year emits 132 pounds of hydrocarbons each year, while a new 1978 auto driven 15,000 miles/year emits only 30 pounds annually. Therefore, this program would provide monetary incentives for individuals to voluntarily sell their old car to the state earlier than they would naturally junk the vehicle. Antique and historic vehicles would not be affected by this program.

CONTROL METHOD TO BE USED: There are five elements to this program:

Old Car Fund: A market would be created for vehicles greater than 12 years old by offering \$450 for such vehicles registered in Los Angeles, Orange, San Bernardino and Riverside Counties. This State-run program would include provisions for the recycling of vehicle materials.

Restrictions on Registration of Out-of-State Old Vehicles: A penalty for registering out-of-State vehicles over 10 years old would prevent an increase in the availability of dirtier

APPENDIX G Continued

non-California vehicles and minimize the number of vehicles which would be purchased with the Old Car Fund. This measure would be administered on a State level.

Used Car Dealer Tax Incentive: In order to avoid competition with used car dealers and to locate dirtier cars more efficiently, the State would provide a tax credit to those dealers who participate in this program. Thus, used car dealerships could become an intermediate depository for older cars which they would not normally purchase. The State would in effect be leasing some of their property for short-term storage. For their involvement, these dealers would be offered an additional \$50 over the price offered to individuals. This credit would only apply to vehicles registered in the four counties which comprise the South Coast Air Basin.

Nominal Registration Fees and Tax for Replacement Vehicles: As an added benefit for low income owners, regular registration fees and sales tax will not be charged for vehicles meant to replace the vehicle sold to the State. Owners selling their cars to the State would be able to register their replacement vehicles (vehicles bought within 30 days before and 60 days after the date of sale of vehicle to the State) for a nominal \$1 in-lieu registration fee and tax.

Private Sector Offset Contribution: Due to the fiscal limitations of State finance programs, additional revenue sources need to be obtained. In addition, as stationary source controls become more expensive, the private sector's need for cost effective emission reductions will increase, particularly for new or modified major stationary sources. This measure would allow for the purchase of Old Car Fund emission reduction credits from the State to offset comparable increases in emissions in the Basin. The trade-off ratio could be negotiated based on the degree of on-going contribution to the Fund, and other considerations.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION:

Old Car Fund: Air Resources Board - 1980

Vehicle Registration Restriction:

State Department of Motor
Vehicles - 1980

APPENDIX G Continued

Used Car Dealer Credit: ARB - 1980

Nominal Registration Fee and Tax for Replacement Vehicle: D.M.V.
- 1980.

Private Sector Offset: SCAQMD/ARB - 1980

#H- 62 - HYDROCARBONS

CONTROL MEASURE NAME: Marine Fuel Transfer Operations

DESCRIPTION/CONTROL METHOD TO BE USED: This tactic will control organic emissions released during in-harbor and dockside transfers of petroleum products. Vapor recovery systems will be used to control these emissions.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: District, 1985

#H-64 - HC/NO_x/CO

CONTROL MEASURE NAME: Off-Road Motorcycle Emission Standards.

DESCRIPTION: Require all new off-road 2-stroke motorcycles to meet 1.6 gram/mile standard for HC exhaust emissions.

CONTROL METHOD TO BE USED: Technological modifications, including engine changes and exhaust treatment.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: ARB, Manufacturers; 1983.

#H-72 - HC/NO_x/CO/SO_x/Part

CONTROL MEASURE NAME: Increased Trucking Efficiency

DESCRIPTION: Increase truck usage efficiency by improving load factors through consolidating trips and loads.

CONTROL METHOD TO BE USED: Reduce truck-trucker VMT for selected freight movement through pricing incentives for truckers, and development of a brokerage-dispatching system to decrease empty backhauls. The ICC indicates that over 18% of all truck movement in the Western region (including California) is by empty trucks, and a sizeable number of trucks are only partially full. This tactic will include incentives for proprietary trucks (owned by private firms for their own use -- such as Safeway, Thrifty's, etc.), to carry backhaul loads when feasible. This tactic assumes a 50% reduction in empty trucks, or a 9% decrease in heavy-duty vehicle miles traveled.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Trucking Operators, ICC, PUC; 1983

#H-85-HC/NO_x/CO/Part/SO_x

CONTROL MEASURE NAME: Freeway Facility and Transit Improvements Supporting High Occupancy Vehicle Movement -- Freeway Transit and Exclusive High Occupancy Vehicle Lanes For Carpools and Buses.

DESCRIPTION: The construction of 178 lane miles of exclusive guideway and 200 lane miles of add-a-lane type of high occupancy vehicle lanes, 127 freeway transit stations, 45,000 park-n-ride lot parking spaces, and an additional 1000 commuter/express buses in order to facilitate high occupancy vehicle movement in the SCAG region.

CONTROL MEASURE TO BE USED: Induce a shift to high occupancy vehicle modes through freeway facility changes which improve level-of-service for multiple occupant vehicles (i.e., reduced time, cost and increased convenience) -- thereby reducing VMT/auto trips and improving air quality.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Caltrans, Transit Operators; 1983

#H-86-HC/NO_x/CO

CONTROL MEASURE NAME: Regional Core Mass Rapid Transit (MRT) - Wilshire Rail Line

DESCRIPTION: Construct the first 18 mile leg of a grade separated line haul, rail transit system beginning at Union Station in the Los Angeles Central Business District aligned west on Wilshire Boulevard, north on Fairfax Avenue to North Hollywood terminating at Lankershim and Chandler Boulevards.

CONTROL METHOD TO BE USED: Divert trips from light-duty-vehicles to this transit mode, thereby reducing vehicle trips/VMT -- improving air quality.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: SCRTD; 1986

#H-87-HC/NO_x/CO

CONTROL MEASURE NAME: Los Angeles Downtown People Mover System (DPM)

DESCRIPTION: Approximately four miles of grade separated, automated-guideway-transit (AGT) intended to serve the central business district (CBD) as a collection/distribution and circulation system. A 2.67 mile route is proposed with terminals at Union Station and the Convention Center and nine other stations which penetrate the CBD's activity centers and intercept regional transit stations and peripheral parking facilities.

CONTROL METHOD TO BE USED: Divert person trips from light-duty-vehicles to transit: directly, by diminishing the number of light-duty-vehicle movements with both origins and destinations internal to the CBD; indirectly, as a supplementary system to regional transit, facilitating terminal collection/distribution -- thereby reducing VMT and improving air quality.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: L. A. Community Redevelopment Agency; 1981

#H-88-HC/NO_x/CO

CONTROL MEASURE NAME: Congestion Relief - Freeway Widenings

DESCRIPTION: Construct 260 miles of additional freeway lanes along designated segments of the freeway network through right-of-way widenings (60 lane miles) and median improvements (200 lane miles). An additional 60-100 route miles of freeway and state highways would be studied for similar improvements.

CONTROL METHOD TO BE USED: Increase freeway capacity at designated locations along network in order to correct peak period bottle-necks, alleviating traffic congestion and reducing delay thereby increasing average vehicle speeds and improving air quality.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: CALTRANS; 1983

#H-89 - HC/NO_x/CO/Part/SO_x

CONTROL MEASURE NAME: Transit System Improvements

DESCRIPTION: Expand local transit service throughout the region by the addition of 1000 buses.

CONTROL MEASURE USED: Increase local transit level-of-service through increased frequency of service and increased spatial penetration (i.e., route miles), affording greater system accessibility -- diverting auto trips to this high occupancy vehicle mode, reducing VMT and improving air quality.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Transit Operators; 1979

APPENDIX G

AIR QUALITY MEASURES

#N-13 - OXIDES OF NITROGEN

CONTROL MEASURE NAME: Retardation of Fuel Injection Timing for Marine Diesel Engines

DESCRIPTION: This class of Diesel engines uses a heavy fraction of fuel oil with resultant NO_x emissions that are higher than if a lighter fraction were burned. Emissions are reduced by 20-25%, using injection timing reduction.

As with other District rules involving marine vessels, complications may arise because of jurisdictional problems.

CONTROL METHOD TO BE USED: Retard fuel injection timing.

IMPLEMENTING AGENCY/YEAR OF IMPLEMENTATION: Federal, State or Local Government, 1985

SECTION 5 TRANSIT MONEYS DISTRIBUTION AGREEMENT

1. This agreement will apply to the inter-county allocation of UMTA Section 5 funds in the Los Angeles/Long Beach urbanized area for FY-79 through the authorization period covered by pending federal transportation assistance legislation.
2. Additional funds which become available for FY-78/79 will be allocated concurrently with FY-79/80 funds;
3. Additional Section 5 funds available in FY 78/79, and all Section 5 funds in FY 79/80 will go to Los Angeles County after the following dollar amount guarantees to Orange and San Bernardino have been met:

	<u>FY-79</u>	<u>FY-80</u>
Orange	\$13,700,000	\$13,022,000
San Bernardino	\$ 1,259,000	\$ 1,366,000

4. A formula approach for UMTA Section 5 allocations in the Los Angeles-Long Beach urbanized area is endorsed. The agreed-upon formula will apply to allocations beginning in FY-80/81 and continue through the period of this agreement.
5. Allocations for FY-80/81 and subsequent years covered by this agreement will be made by a three-factor formula. The factors, and their respective weightings are:
 1. % Population - 60%
 2. % Revenue Vehicle Miles - 20%
 3. % Boardings - 20%
6. The allocation of UMTA Section 5 funds will be treated independently from other funds, e.g. TDA funds.
7. A "one plus two" carry-over rule at the regional level; that is, funds are to be available for use by the county to which they are allocated and for two years after is established. If they have not been expended (drawn-down) during these years, they will revert to the regional fund for redistribution by the SCAG Executive Committee.
8. A principle of fiscal prudence is adopted to the effect that increases in service or reduction in fares will not be undertaken unless they can be sustained throughout the entire period of this agreement.
9. To continue to examine the utility of including efficiency and effectiveness measures in future year allocations, but not to include these measures in the formula during the period of this agreement.
10. Each of three factors in the formula will be updated annually for purposes of making allocation calculations. FY-77/78 transit operating data and January 1, 1978 population data will be used for making FY-80/81 allocations. FY-78/79 data will be used for FY-81/82; and so on.
11. Transit system data submitted to SCAG for purposes of making annual formula calculations will be verified by each county transportation commission.
12. SCAG will update population figures annually.

Appendix I

Finance Element Major Assumptions

The following major assumptions were used in Section I and II of this analysis. (Other assumptions are detailed in the text and in the notes in Appendix J.)

- (1) Expenditures will generally grow by 8% annually.
- (2) There will be no new revenue sources or tax rate increases.
- (3) Federal Highway Administration funds allocated to California will grow by approximately 5% annually.
- (4) After fiscal year 1983 the state will continue to retain sufficient state cash to match all federal funds. This will be done despite a projection of inadequate funds for full highway maintenance after that time.
- (5) Consistent with preliminary five year highway capital fund estimates provided by CALTRANS, the SCAG region will be allocated 40% of revenues available statewide for highway capital outlay.
- (6) Cities and counties will retain sufficient local funds to match federal capital revenue apportionments.
- (7) Transit capital expenditures after 1982 will remain at approximately 15% of operating expenditures (the percentage for 1983 in the aggregated Short-Range Transit Plans).
- (8) CALTRANS will pay for maintenance costs of high occupancy vehicle lanes, highway transit stations, and park-n-ride lots.
- (9) All operating costs for the Mass Rapid Transit Starter Line, and the Downtown People Mover will be covered by fares, advertising, parking fees, and other miscellaneous operating revenues.
- (10) All costs will be incurred by FY 1988 with two exceptions: (1) the costs for highways 7, 30, 47, and 86, and (2) a small portion of the costs for element II of the complete RTDP.

Appendix J - Notes for Tables 1 - 6

Table 1

- (1) Except for UMTA Section 5, FY 1979 figures from short-range transit plans of regional transit operators for all entries as noted. Section 5 funds are taken from the new transit legislation.
- (2) Based on the SRTPs it is assumed that 70% of capital expenditures will be funded by UMTA Section 3 funds. An additional \$100 million is assumed to be available for the DPM during FY 1979-1984.
- (3) Federal legislation has increased the region's Section 5 allotment by approximately 35%. It is assumed that the FY 1984-1988 allotment will be 35% greater than that for FY 1979-1983.
- (4) Pending federal legislation leaves FAU funds at current levels. It is assumed that FAU funds will remain at current levels over the ten-year period.
- (5) Total TDA forecasts from the UCLA Business Forecasting Project. It is assumed that system maintenance costs not covered by other sources are covered by TDA funds.
- (6) Fares and miscellaneous revenues are assumed to provide 32% of operating revenues. This is a region-wide percentage taken from the SRTPs. Additionally, all operating costs for the DPM and MRT, as well as 32% of operating costs for commuter/express buses, are assumed to be financed via fares and miscellaneous revenues. For the sake of simplicity all of these revenues are included under fares.
- (7) See Note 6.
- (8) The portion of state gas tax needed to match Federal Aid Interstate for freeway transit guideway.
- (9) Assumes that all FAI funds needed to complete the Interstate system in the SCAG region by FY 1988 will be made available. The portion going to transit is for freeway transit guideway.
- (10) See note 9.
- (11) Assumes that federal revenues to California will grow by 14% every three years. This percentage is based on analysis of federal highway legislation. All additional federal aid is assumed to be used for capital expenditure. It is also assumed that the proportion of FAP, FAO, and state gas tax funds for capital expenditure is the same as preliminary estimates for FY 1980-1984 provided by CALTRANS (39%).
- (12) See note 4. After deducting FAU funds to transit, it is assumed (based on estimates of current FAU use provided by CALTRANS) that approximately 19% of remaining funds go to highways, and 81% to streets and roads.

Appendix J Continued

Appendix J - Notes for Tables 1 - 6

Table 1 (Continued)

- (13) See note 11.
- (14) Capital revenue amount based on assumption in note 11. It is assumed that 30% of state non-capital revenues (assumed to be equivalent to expenditures) will be used in the SCAG region. Historically (1967-1976) approximately 30% of CALTRANS maintenance expenditures were made in the SCAG region. From the total, all FAU, other local federal aid, and Proposition 5 is deducted. It is also assumed that during FY 1984-1988 all federal funds may be used for non-capital purposes.
- (15) See note 4.
- (16) Base numbers from State Controller's, Financial Transactions Concerning Streets and Roads, FY 1976-1977, and SCAG working paper entitled, Preliminary Impacts of Proposition 13 on Transportation in the Region. Assumed to grow 14% every three years beginning in FY 1979.
- (17) Base numbers, see note 15. Assumed to remain at FY 1979 level.
- (18) Assumes that 10% of TDA funds will be allotted to streets and roads.
- (19) See note 16.
- (20) From 1978 Draft Regional Transportation Plan. No figures available for FY 1984-1988.
- (21) See note 19.
- (22) Remainder of TDA funds after transit and streets and roads funds removed per notes 6 and 17.
- (23) Estimate from CALTRANS.

Appendix J Continued

Appendix J - Notes for Tables 1 - 6

Table 2

- (1) FY 1979-1983 calculated by deducting operating expense for 450 buses from the SRTPs. This adjustment is made to reflect the projected impact of Proposition 13, particularly in Orange County. Costs assumed to grow at 8% annually after FY 1983.
- (2) FY 1979-1983 calculated by deducting capital expense of 450 buses from the SRTPs. FY 1984-1988 costs assumed to be approximately 14% of operating expenditures. This percentage is consistent with the regionwide ratio provided in the SRTPs for FY 1983.
- (3) Alternative II, Draft Report on Alternatives Analysis and Environmental Impact Statement for a Rapid Transit System in the Los Angeles Regional Core, 8-31-78, SCRTD. Capital expenditures are assumed to commence in FY 1979 and end in FY 1987. Per the findings of the report, all operating costs are assumed to be financed by fares. All costs are escalated at 8% per year.
- (4) From the Regional Transit Development Program Integrated Program Report, October 1978, and Community Redevelopment Agency. Assumes capital expenditures from FY 1979 through FY 1981, escalated at 8% yearly. Operating costs assumed to commence in FY 1981. All operating costs are assumed to be financed via fares, advertisements, parking, and other miscellaneous sources. \$100 million of capital costs are assumed to be financed with UMTA Section 3 funds. \$25 million in capital costs is assumed to be financed with UMTA Section 3 funds. \$25 million in capital costs is assumed to be financed by the FHWA. Another \$17 million in capital funding assumed from miscellaneous sources. Note that Proposition 5 funds which could be used for additional financing are, for the purpose of analysis, excluded.
- (5) From the Regional Transit Development Program Integrated Program Report October 1978. Capital funding from FAI, and state Article 19. Based on SRTP's, 32% of bus operating revenue assumed to be covered by fares.

Appendix J Continued

Appendix J - Notes for Tables 2 - 7

- (6) Highway expenditures are implicitly derived from the following assumptions about CALTRANS' revenues and expenditures.
 - (a) Capital and non-capital expenditures are constrained by total revenue.
 - (b) FAI and FAP revenues provided to CALTRANS are assumed to grow by 14% every three years.
 - (c) All new federal monies are assumed to be used for capital expenditures during FY 1979-1984.
 - (d) After FY 1984, non-capital needs are assumed to grow by 6% annually.
- (7) See note 14, Table 1.
- (8) Approximates totals from the CALTRANS 1977 6-Year Planning Program. Excludes the amount for metered ramp bypasses (Note 19) and traffic signal synchronization (Table 3, Note 7).
- (9) Assumes an additional 82 or 83 ramps will be built per year between FY 1979 and FY 1988. Capital costs assumed to increase at 8% yearly. Operating costs assumed to be paid from CALTRANS' non-capital funds.
- (10) Total for operational improvements less metered ramps, traffic signals, ramp bypasses, and Commuter Computer.

Appendix J Continued

Appendix J - Notes for Tables 1 - 6

Table 2 (Continued)

- (11) See note 14.
- (12) From 1978 Draft Regional Transportatin Plan, documents from San Bernardino County and CALTRANS. Assumes equal yearly costs (in current dollars) are escalated at 8% annually. Maintenance costs are assumed to be paid from CALTRANS' non-capital funds. Expenditures for highways 7, 30, 47, and 86 are assumed to occur after FY 1988.
- (13) Costs escalated beginning in FY 1980. Maintenance costs assumed to be paid from CALTRANS' non-capital budget.
- (14) Assumes an additional 136 bypasses built during FY 1979-1983 (from the TIP) and 304 during FY 1984-1988. Capital costs escalated at 8% yearly funded from highway operational improvements. Maintenance costs assumed to be paid from CALTRANS' non-capital funds.
- (15) Base data from State Controller's Financial Transactions Concerning Streets and Roads, FY 1976-1977. Assumed to escalate at 8% annually until all non-federal funds are expended, except for those needed to match federal funds.
- (16) Total street and road revenue less maintenance, administration, traffic signals, and rideshare (\$1 million in FY 1984-1988).
- (17) See note 20, Table 1.

Table 3

- (1) Costs escalated annually beginning in FY 1984. Costs are assumed to be borne 50% by the public sector and 50% by the private sector.
- (2) Costs escalated annually beginning in FY 1979.
- (3) Costs, escalated annually beginning in FY 1979, are assumed to be funded from TDA funds. Private sector costs are undetermined.
- (4) Costs escalated annually beginning in FY 1982.

Appendix J Continued

Appendix J - Notes for Tables 1 - 6

Table 3 (Continued)

- (5) Costs escalated annually beginning in FY 1979. Assumes 24 additional lots built yearly until FY 1984, plus 10 lots in FY 1985.
- (6) Costs escalated annually beginning in FY 1979. One third of costs are assumed to be borne by the public sector.
- (7) Assumes that 660 additional intersections will be synchronized per year by local governments and Caltrans beginning in FY 79. Extrapolating from the TIP, it is assumed that approximately \$15 million will be funded during FY 1979 - 1983. Another \$16 million is assumed to be funded during the next 5 years.
- (8) Costs escalated beginning in FY 1981 and ending in FY 1987. Assumes that 53,000 cars will be purchased yearly.
- (9) Annualized costs are taken from the Draft Air Quality Management Plan, August, 1978. This cost is escalated beginning in FY 1984, and is assumed to be borne 50% by the public sector.
- (10) Costs escalated yearly beginning in FY 1984. Assumes purchase of 200 buses yearly, and fare funding of 32% of operating costs. This is a regional percentage taken from the short-range transit plans of the transit operators.
- (11) All private sector costs are derived per the explanation in the text except as noted below.
- (12) Costs escalated beginning in FY 1981.
- (13) See note 9.
- (14) Annualized costs, taken from the Draft AQMP, August 1978, are escalated beginning FY 1984.

Appendix J Continued

Appendix J - Notes for Tables 1 - 6

Table 5

- (1) Calculated by multiplying projected CALTRANS capital expenditures in the state (including Proposition 5 funds) by the percentage of highway user revenues provided by the SCAG region (approximately 50% according to a SCAG document entitled State Highway Expenditures and Revenues, 1967-1976) and then deducting the amount of projected capital expenditures in the SCAG region for the same period.
- (2) Calculated by taking 80% of the capital costs for these elements.
- (3) Assumes demand for taxed merchandise is perfectly price inelastic.

Table 6

- (1) Assumes perfectly price inelastic goods (i.e., demand does not change with imposition of tax).

Appendix K Continued

APPENDIX K

Table A3 provides the capital and operational/maintenance costs for each of the recommended mobile source control measures. All of the costs are stated in current (1978) dollars. Capital costs include the cost of facility construction or the purchase of operating equipment. Annual operating and maintenance costs reflect the expense of operating a facility or running a program during a given year.

Annualized costs have been developed to allow costs for various measures to be compared despite different facility lives and capital to operating cost ratios. The capital costs are annualized based on the project life of the measure and an 8% discount rate. Total annualized costs are the sum of annualized capital costs and annual operating and maintenance costs.

Columns 5 and 6 divide annualized costs into those assumed to be borne by the public sector and those assumed to be borne by the private sector. In certain instances (for example, the Rideshare Program, measure H-34) costs are assumed to be shared by both sectors.

Table A3 also breaks down the per vehicle costs for tactics which require vehicle acquisition. The final column lists the assumed project life, which is either the facility life of capital equipment purchased, or the expected life of a program.

For example, the Wilshire Starter Line (H-86) has an assumed facility life of 50 years, whereas the Voluntary Retirement of Older Cars Program is simply assumed to cease operation after 7 years.

For certain recommended measures cost information is unavailable or has not yet been determined. Hopefully as the AQMP evaluation process proceeds this missing information will be determined and the table can be completed. Where data is incomplete it has been referenced and noted in Appendix J.

Other tactics such as H-1, H-2, and H-4 involve changes in operations and/or policies and as such involve no direct costs to either the private or public sectors. As a result of the implementation of these measures a net savings will accrue to the groups involved.

Appendix K

A-3

CAPITAL, OPERATING, AND MAINTENANCE COSTS FOR THE AQMP RECOMMENDED MEASURES

Measure Number	Name of Measure	Total Capital Costs (Crnt. \$1,000's)	Annualized Capital Costs (Crnt. \$1,000's)	Annual Operating and Maintenance Costs (Crnt. \$1,000's)	Direct Total Annualized Costs to Public Sector (Crnt. \$1,000's)	Direct Private/Household Sector Total Annualized Cost (Crnt. \$1,000's)	Unit Cost (Current \$'s) Capital O+M	Number of Years of Project
H-1	Increased air passenger load factor		Net	Savings				
H-2	Jet Aircraft Ground taxi operation		Net	Savings				
H-4	Modified work schedules		Net	Savings	(to employers & employees)			
H-5	Parking Management:	0	0	0	0	0		
	Carpool Preferential Prkg.							
H-6	New General Aviation Aircraft engine controls	15,000	1,530	(1)	0	1,530	\$700-\$1,500/ Vehicle	20
H-7	Emission standards for all new non-farm heavy-duty off-road vehicles (construction, landfill and other vehicle types)	6,500	662	980	0	1,642	\$450-\$1,000/ Vehicle	20
H-11	Electrify Rail yards	24,000	2,100	(2)	0	2,100 ⁽³⁾		
H-13	Trip Reduction Program	0	0	5,000	5,000	0		
H-15	Emissions standards for new farm equipment	6,600	670	740	0	1,410	\$500/Vehicle	20
H-16	Modify old and new jet aircraft engines to meet proposed 1978 Fed. standards	132,000	13,500	Undetermined	0	13,500		20
H-18	Inspection and maintenance of light-duty vehicles	250,000	37,000	69,505	0	106,505	\$15/Vehicle	10
H-23	Increased bicycle and pedestrian facilities	120,000	10,600	(4)	10,600	0		
H-24	Improved emissions controls for motor vehicles (1982-1987) ⁽⁵⁾	325,500	81,525	3,250	0	84,775	\$100/Car \$1,000/Truck	5
H-25	Reduce jet aircraft queuing delays	15,000	1,530	-400 (Annual Savings)	1,130	0		20
H-34	Rideshare Program	1,500	224	37,776	12,000	26,000		10
H-35	Traffic signal synchronization	49,500	5,040	-	5,040	0		20
H-36	Voluntary retirement of older cars	153,100	21,200	1,300 ⁽⁶⁾	22,500	0	\$425/Car	7
H-64	Apply on-road Motorcycle emissions standards to off-road motorcycles	37,500	5,600	11,500	0	17,100	\$150/Vehicle \$40/Vehicle	10
H-72	Improved trucking efficiency	(7)	(7)	(7)	(7)	(7)		
H-85	Freeway facility and transit improvements supporting high occupancy vehicle movement	1,722,294	161,108	112,554	273,662	0		30 ⁽⁸⁾
H-86	Wilshire Rail Line	1,120,000	91,549	23,000	114,549	0		50
H-87	Los Angeles Downtown People Mover	167,000	14,835	4,000	18,835	0		30
H-88	Congestion Relief-Freeway Widening	77,800	6,911 ⁽⁹⁾	0	6,911	0		30
H-89	Transit Improvements	150,000	19,905	86,000	105,905	0		12
TOTAL					\$576,132	\$254,562		

Appendix K Continued

Notes for A-3

- (1) There will be an estimated 17% reduction in fuel consumption. There may be additional operating and maintenance costs, but these costs should be offset by a savings in fuel consumption.
- (2) This measure should result in an actual savings in operating and maintenance costs, although exact costs haven't been determined.
- (3) The public sector may assume 50% of the financing of this measure.
- (4) Operating and maintenance costs may be included in the street system budget.
- (5) The costs included are for the first 5 years of the program only in order to be consistent with estimated emission reductions. The costs for the program are likely to continue into the future.
- (6) Includes a savings from the resource recovery of scrap metals.
- (7) Costs for this measure are undetermined at this time.
- (8) The project life for all elements of this measure is assumed to be 30 years with the exception of the commuter express buses which are assumed to have a project life of 12 years.
- (9) Caltrans assumes that all costs are capital and that there will be no additional operating and maintenance costs.



C124884945

1960-1961

1. The first part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second. The general survey is given in the first section and the detailed account in the second.

2. The second part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

3. The third part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

4. The fourth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

5. The fifth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

6. The sixth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

7. The seventh part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

8. The eighth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

9. The ninth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

10. The tenth part of the report is devoted to a description of the work done during the year. It is divided into two main sections: a general survey of the work done and a detailed account of the results obtained. The general survey is given in the first section and the detailed account in the second.

